

**1/26/10
DEPT. OF
REVENUE
FORECASTS**

<target><bill></bill><subject>1-26-10 DEPARTMENT OF REVENUE
FORECASTS</subject><comm>SF26</comm></target>

Revenue Sources Book

Alaska Department of Revenue – Tax Division



FALL 2009

Revenue Sources Book

Alaska Department of Revenue – Tax Division

FALL 2009

Tax Division Contact Persons

Jonathan Iversen, Director

907-269-6620

jonathan.iversen@alaska.gov

Dona Keppers, Audit Master

907-269-1034

dona.keppers@alaska.gov

Jennifer Duval, Petroleum Economist

Revenue Sources Book Editor & Publisher

907-269-1025

jennifer.duval@alaska.gov

Tim Harper, Economist

Non-Petroleum Revenue

907-269-1020

timothy.harper@alaska.gov

Contact Persons for Specific Topics

Alaska Permanent Fund

Julie Hamilton, Chief Financial Officer

Alaska Permanent Fund Corporation

907-796-1535

jhamilton@alaskapermfund.com

Constitutional Budget Reserve Fund

Jerry Burnett, Deputy Commissioner

Alaska Department of Revenue, Treasury Division

907-465-2300

jerry.burnett@alaska.gov

Restricted Revenue

John Boucher, Senior Analyst

Office of the Governor, Management and Budget

907-465-4677

john.boucher@alaska.gov

About the Cover

April 4, 2009 Eruption of Mount Redoubt, taken by Game McGimsey

© Copyright Alaska Volcano Observatory, U.S. Geological Service

STATE OF ALASKA

DEPARTMENT OF REVENUE OFFICE OF THE COMMISSIONER

Sean Parnell, Governor

□ State Office Building
PO Box 110420
Juneau, AK 99811-0420
907.465.2301

* 550 W Seventh, Suite 1820
Anchorage, AK 99501-3555
907.269.0080

www.revenue.state.ak.us

December 10, 2009

The Honorable Sean Parnell, Governor of Alaska
P.O. Box 110001
Juneau, Alaska 99811-0001

Dear Governor Parnell,

I am pleased to present to you the Department of Revenue's Fall 2009 *Revenue Sources Book* (RSB). The RSB is a compilation of revenues received in Fiscal Year 2009 and projections of revenues for FY 2010 through FY 2019, and is prepared for the purpose of informing you, the Alaska Legislature, and the public of Alaska's revenue outlook. The RSB represents a collaborative effort between the Department of Revenue Tax and Treasury divisions, the Permanent Fund Corporation, and the Office of Management and Budget.

Alaska's revenue is presented in four categories, unrestricted and restricted oil revenue, and unrestricted and restricted revenue from non-oil sources. Revenue from oil production continues to dominate the state's revenue picture, providing close to 89% of the general fund unrestricted revenue in FY09. We project that oil revenue will provide at least 87% of general fund unrestricted revenue throughout the forecast period, to FY 2019.

The amount of oil revenue received depends heavily on oil prices, and oil prices in FY 2009 were exceptionally volatile, climbing to \$133 per barrel early in the fiscal year, and dropping to \$38 per barrel five months later. Oil prices have stabilized significantly since the beginning of FY 2010, and we forecast continued stabilization for the remainder of the year, with FY 2010 prices averaging \$66.93 per barrel. This is \$8.64 above our previous FY 2010 forecast of \$58.29, provided in Spring 2009. Our longer term oil price forecast is based upon an expectation of gradual economic recovery for the U.S. and other developed nations, and a corresponding gradual increase in demand for petroleum products. Under this scenario, we forecast oil prices increasing to \$76.35 and \$83.93 in FY 2011 and FY 2012, respectively.

Oil production on the North Slope continues to decline, with 3.3% less oil produced in FY 2009 than in FY 2008. Production in FY 2010 is expected to decline 4.8%, to 659,000 barrels per day, and a decline of another 5.4% is expected in FY 2011. We project some improvement

Letter to Governor Sean Parnell
December 10, 2009
Page 2

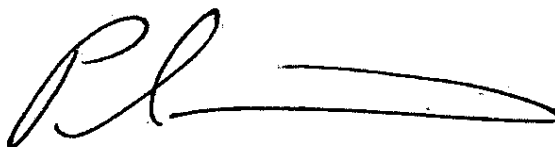
in production beginning in FY 2012, with new projects coming online. Our forecast calls for first oil production in the Nikaitchuq Unit in FY 2011 and in the Point Thomson Unit in FY 2014.

Total unrestricted revenue in FY 2009 was approximately \$5.8 billion. For FY 2010 and FY 2011, we forecast total unrestricted revenue to be \$4.8 billion, and \$5.2 billion, respectively. Non-oil sources are projected to make up \$610 million and \$589 million of the FY 2010 and FY 2011 unrestricted totals.

Relatively high oil prices since 2005 have enabled the state to set aside some of the excess revenue in the state's Constitutional Budget Reserve Fund (CBRF). We devote this RSB's feature chapter to the establishment and history of the CBRF, its use over the years, its current balance, and its future. More about the CBRF—the state's "other" savings account—can be found in Chapter 3 of this publication.

We hope you find the information provided in the Fall 2009 *Revenue Sources Book* to be useful. Our next forecast for FY 2010 and FY 2011 will be published in the spring of 2010.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Galvin', with a long horizontal flourish extending to the right.

Patrick Galvin
Commissioner

Revenue Sources Book

Alaska Department of Revenue – Tax Division

FALL 2009

1. Introduction.....	1
2. Executive Summary	3
3. The Constitutional Budget Reserve Fund	17
A historical look at the Constitutional Budget Reserve Fund.	
4. Oil Revenue.....	25
In FY 2010, oil revenues are projected to contribute 87% of the state's General Purpose Unrestricted Revenue. Oil revenues will continue to play a key role in Alaska's future.	
5. Other Revenue (except Federal & Investment)	45
Revenue from non-oil sources includes non-oil taxes, charges for services, fines and forfeitures, licenses and permits, rents and royalties and other revenue sources.	
6. Federal Revenue	59
Federal funding accounted for \$2.1 billion of the state's total revenue in FY 2009.	
7. Investment Revenue	63
Investment earnings come from the Alaska Permanent Fund, Constitutional Budget Reserve Fund, General Fund and other state investments.	
8. State Endowment Funds	71
Alaska has six endowment funds including the Alaska Permanent Fund, Mental Health Trust, Public School Trust, Alaska Children's Trust, Power Cost Equalization Endowment and the University of Alaska Endowment.	
9. Public Corporations & the University of Alaska	75
Seven public corporations and the University of Alaska are treated as separate component units of state government for financial reporting purposes.	
10. Appendices	83
The appendices provide 10 years of historical data and 10 years of forecast data on oil revenue, prices and production.	



Revenue Sources Book

Alaska Department of Revenue – Tax Division

FALL 2009

1. Introduction

General Discussion

The purpose of the Revenue Sources Book is to provide the governor, legislature and citizens of the state a summary of our past collections of state revenue and a forecast of future revenue. Revenues are categorized into four major components: oil revenue, income from sources other than oil, federal revenue and investment revenue.

Oil revenue continues to dominate the unrestricted revenue picture—and is projected to provide more than 87% of General Purpose Unrestricted Revenue through FY 2019. However, North Slope oil production is declining. In FY 2009, Alaska North Slope (ANS) output was 0.692 million barrels per day compared to a peak of 2.006 million barrels per day in FY 1988. While production declined by about 65% over that period, the market price of

oil has more than tripled. For FY 2010, we project ANS oil production will decrease to 0.659 million barrels per day.

Before 2003, the Constitutional Budget Reserve Fund (CBRF) was used to balance the state's budget in 10 of the previous 15 years. Fiscal Year 2008 was a banner revenue year, in which surpluses exceeding \$5 billion were deposited in the CBRF. Lower prices in the future, combined with the fall in North Slope crude oil volumes, could lead to future budget shortfalls and draws on the CBRF.

The oil and gas production tax known as Alaska's Clear and Equitable Share (ACES) was signed into law on December 19, 2007. This tax is designed to encourage investment in Alaska by the petroleum industry, while providing an open, transparent tax system in which

both the industry and the people of the state can have confidence that the state is receiving a fair share of the revenue from Alaska's petroleum resources.

Alaska's total revenue picture also includes earnings from investments in the Permanent Fund and CBRF, federal revenue and other sources, such as taxes, charges for services, licenses, permits, and fines and forfeitures. The information in this book will provide greater insight into not only the sources of revenue that support the state today, but also into future revenue from potential new sources.

Please note that totals in some tables throughout this publication may not equal the sum of components due to rounding.



Revenue Sources Book

Alaska Department of Revenue – Tax Division

FALL 2009

2. Executive Summary

Total State Revenue

Figure 2-1. FY 2009 Total State Revenue: \$2.5 billion

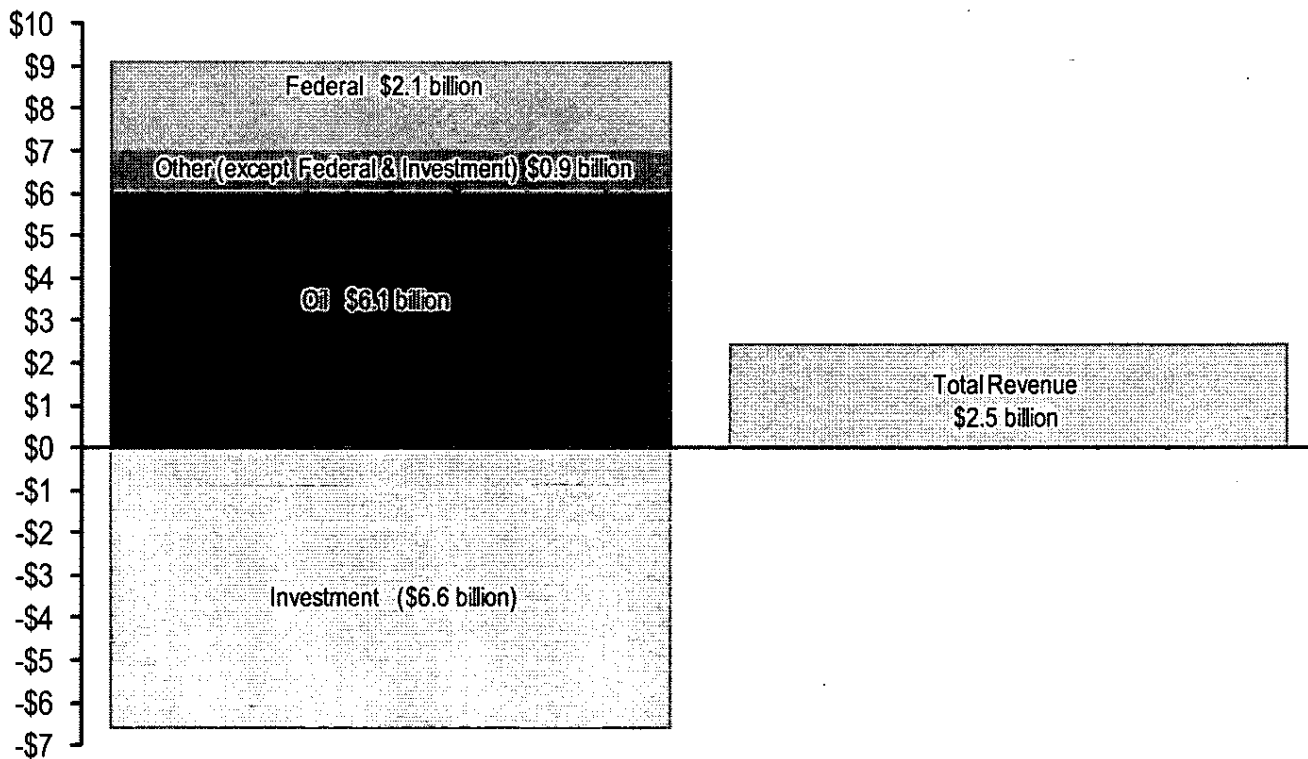


Figure 2-2. Total State Revenue by Major Component, FY 2009 and Forecasted FY 2010-2011
(\$ million)

Oil Revenue	History	Forecast	
	FY 2009	FY 2010	FY 2011
Unrestricted			
Petroleum Property Tax	111.2	101.1	96.3
Petroleum Corporate Income Tax	492.2	470.0	580.0
Production Tax	3,112.0	2,126.1	2,430.9
Royalties (including Bonuses, Rents, & Interest)	1,465.6	1,470.3	1,540.4
Subtotal	5,181.0	4,167.5	4,647.7
Restricted			
Royalties to Perm. Fund & School Fund (includes Bonuses & Rents)	670.8	611.7	683.4
Tax Settlements to CBRF	202.6	440.7	20.0
NPR-A Royalties, Rents & Bonuses	14.8	4.9	4.9
Subtotal	888.2	1,057.3	708.3
Total Oil Revenue	6,069.2	5,224.8	5,356.0
Other Revenue (except Federal & Investment)			
Unrestricted			
Taxes	294.7	284.4	298.8
Charges for Services	19.3	20.0	23.2
Fines and Forfeitures	10.5	8.9	8.9
Licenses and Permits	35.5	40.5	38.8
Rents and Royalties	15.6	13.6	14.2
Other	27.0	21.9	21.9
Subtotal	402.6	389.3	405.8
Restricted			
Taxes	155.4	138.9	138.7
Charges for Services	250.9	257.2	258.4
Fines and Forfeitures	39.1	36.1	34.9
Licenses and Permits	34.7	39.2	39.5
Rents and Royalties	7.4	9.0	9.6
Other	58.3	108.5	108.5
Subtotal	545.8	588.9	589.6
Total Other Revenue	948.4	978.2	995.4

Figure 2-2. Continued

Federal Revenue	History		Forecast	
	FY 2009	FY 2010	FY 2011	
Restricted	2,088.4	2,916.7	2,916.7	
Total Federal Revenue	2,088.4	2,916.7	2,916.7	
Investment Revenue				
Unrestricted				
Investments	247.4	219.7	181.8	
Interest Paid by Others	0.2	1.4	1.4	
Subtotal	247.6	221.1	183.2	
Restricted				
Investments	57.1	51.7	45.5	
Constitutional Budget Reserve Fund	(526.6)	968.2	578.5	
Other Treasury Managed Funds	(30.6)	49.9	26.3	
Alaska Permanent Fund (GASB) ⁽¹⁾	(6,394.4)	2,237.6	2,602.5	
Subtotal	(6,894.5)	3,307.3	3,252.8	
Total Investment Revenue	(6,646.9)	3,528.4	3,436.0	
Total Unrestricted & Restricted Revenue	2,459.1	12,648.1	12,704.1	

⁽¹⁾ Both realized and unrealized gains and losses are included per GASB 34 as interpreted by the Finance Division of the Department of Administration in its Comprehensive Annual Financial Report.

Figure 2-3. Total State Revenue by Major Component, FY 2009 (\$ billion)

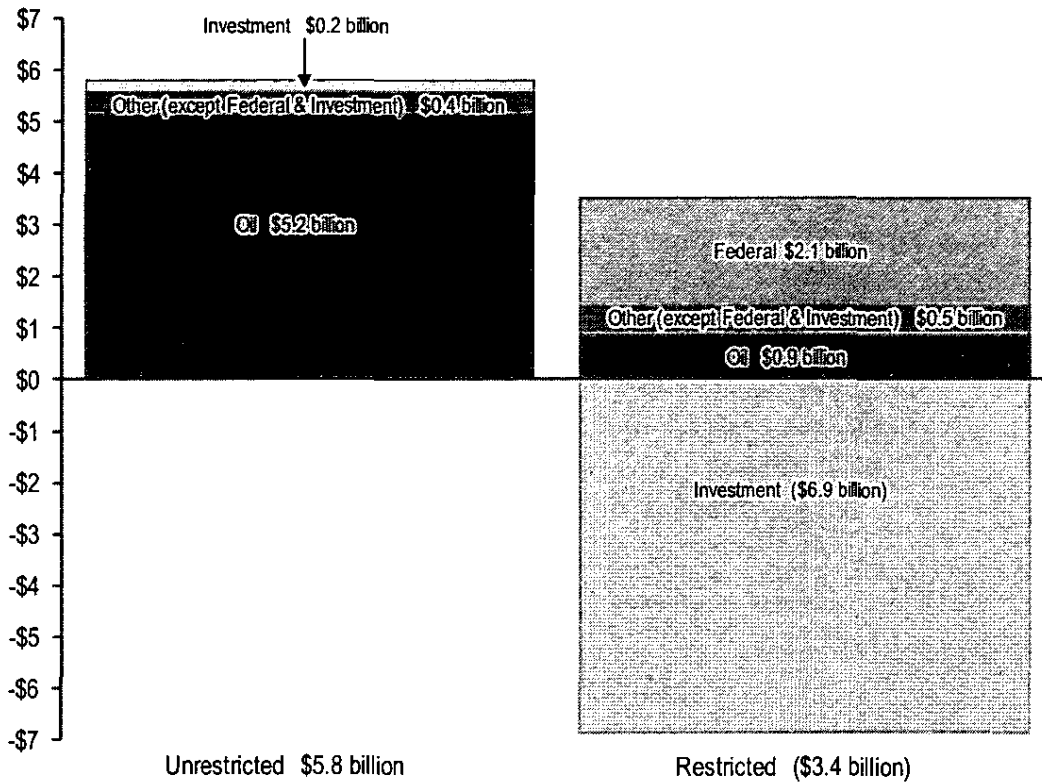


Figure 2-4. Total State Revenue, FY 2009 and Forecasted FY 2010-2011 (\$ million)

Unrestricted	History	Forecast	
	FY 2009	FY 2010	FY 2011
Oil Revenue	5,181.0	4,167.5	4,647.7
Other Revenue (except Federal & Investment)	402.6	389.3	405.8
Investment Earnings	247.6	221.1	183.2
Subtotal	5,831.2	4,777.9	5,236.6

Restricted

Oil Revenue	888.2	1,057.3	708.3
Other Revenue (except Federal & Investment)	545.8	588.9	589.6
Investment Earnings	(6,894.5)	3,307.3	3,252.8
Federal Revenue	2,088.4	2,916.7	2,916.7
Subtotal	(3,372.1)	7,870.2	7,467.4

Total Unrestricted & Restricted Revenue	2,459.1	12,648.1	12,704.1
--	----------------	-----------------	-----------------

Unrestricted Revenue and Restricted Revenue

Throughout this forecast, we report two categories of revenue: General Purpose Unrestricted Revenue (frequently referred to as unrestricted revenue) and restricted revenue. These two types of revenue are based on the two components of the General Fund in the Alaska State Accounting System (AKSAS)—the unrestricted component and the restricted component—with certain adjustments.

General Purpose Unrestricted Revenue (GPUR)

General Purpose Unrestricted Revenue reflects revenue that is not restricted by the constitution, state or federal law, trust or debt restrictions, or customary practice. Most legislative and public debate centers on this category of revenue, and this is the amount generally used for budget planning purposes and designated in budget documents as General Fund revenue. In this forecast, General Purpose Unrestricted Revenue includes funds deposited into the unrestricted component of the General Fund, with certain adjustments:

- Reductions might include (a) revenue earmarked for specific programs, (b) pass-through revenue for qualified regional aquaculture and dive fishery associations and (c) revenue shared with municipal governments and organizations (e.g., fisheries taxes).
- Additions might include transfers from the unclaimed property trust to the state treasury.

The Department of Revenue uses a three-step process to make its final estimate of General Purpose Unrestricted Revenue.

Step 1. We estimate all revenue for the unrestricted component of the General Fund in AKSAS, as well as certain program receipts, by using our forecast models and obtaining estimates from other state agencies.

Step 2. We then consult the Governor's Office of Management and Budget and Legislative Finance for their input.

Step 3. Finally, following analysis, we adjust our initial projection to derive a forecast of total General Purpose Unrestricted Revenue.

Figure 2-5 on the next two pages sets out FY 2009 General Purpose Unrestricted Revenue and our forecast for FY 2010 and 2011.

Restricted Revenue

Restricted revenue represents any revenue that is not considered General Purpose Unrestricted Revenue. This includes revenue restricted by the constitution, state or federal law, trust or debt restrictions, or customary practice. Restricted revenue reported in this forecast includes money deposited into the restricted component of the General Fund with certain additions. Additions might include (a) receipts deposited in funds other than the General Fund and (b) receipts that are deposited into the unrestricted component of the General Fund but are restricted by statute or customarily appropriated for a particu-

lar purpose or program, such as sharing of fish tax revenue with municipalities.

Article IX, Section 15 of the Alaska constitution requires that at least 25% of all mineral lease rentals, royalties, royalty sale proceeds, federal mineral revenue sharing payments and bonuses received by the state be placed in the Permanent Fund. Until 2003, Alaska Statute 37.13.010 required the placement of 50% of royalties from certain leases into the permanent fund. House Bill 11, passed by the legislature in 2003, changed the law so that 25% from all leases would be placed into the Permanent Fund, contingent on the impact of this change to the Permanent Fund Dividend. On October 1, 2008, the impact of HB 11 on the Permanent Fund Dividend had exceeded the limitations provided in HB 11, and HB 11 was repealed. As of October 1, 2008, 50% of the royalties from applicable leases are paid to the Permanent Fund, while 25% from other leases are paid to the fund. This change is reflected in this revenue forecast as a decrease in unrestricted revenue and an increase in restricted revenue.

Figure 2-5. General Purpose Unrestricted Revenue, FY 2009 and Forecasted FY 2010-2011 (\$ million)

Oil Revenue	History	Forecast	
	FY 2009	FY 2010	FY 2011
Petroleum Property Tax	111.2	101.1	96.3
Petroleum Corporate Income Tax	492.2	470.0	580.0
Production Tax			
Oil & Gas Production	3,100.9	2,115.6	2,421.0
Oil & Gas Hazardous Release	11.1	10.5	9.9
Subtotal Production Tax	3,112.0	2,126.1	2,430.9
Royalties (including Bonuses, Rents, & Interest)			
Mineral Bonuses & Rents	12.4	18.3	14.1
Oil & Gas Royalties	1,451.2	1,447.0	1,521.3
Interest	2.0	5.0	5.0
Subtotal Royalties	1,465.6	1,470.3	1,540.4
Total Oil Revenue	5,181.0	4,167.5	4,647.7
Other Revenue (except Federal & Investment)			
Taxes			
Excise Tax			
Alcoholic Beverage	19.5	19.0	19.5
Tobacco Product – Cigarette	36.4	32.9	31.6
Tobacco Product – Other	10.2	10.6	11.5
Insurance Premium	45.5	43.9	43.0
Electric and Telephone Cooperative	0.1	0.1	0.1
Motor Fuel	10.1	30.0	40.3
Vehicle Rental	8.0	8.1	8.4
Tire Fee	1.5	1.5	1.5
Subtotal Excise Tax	131.3	146.1	155.9
Subtotal Corporate Income Tax	120.9	86.6	89.1
Fisheries Tax			
Fisheries Business	19.3	15.1	16.4
Fishery Resource Landing	4.7	4.7	6.1
Subtotal Fisheries Tax	24.0	19.8	22.5

Figure 2-5. Continued

Other Revenue (except Federal & Investment)	History	Forecast	
	FY 2009	FY 2010	FY 2011
Other Tax			
Mining	15.5	29.2	28.6
Estate	0.2	0.0	0.0
Charitable Gaming	2.8	2.7	2.7
Subtotal Other Tax	18.5	31.9	31.3
Subtotal Taxes	294.7	284.4	298.8
Charges for Services			
General Government	8.8	9.5	12.7
Natural Resources	2.0	2.0	2.0
Other	8.5	8.5	8.5
Subtotal Charges for Services	19.3	20.0	23.2
Subtotal Fines & Forfeitures	10.5	8.9	8.9
Licenses & Permits			
Alcoholic Beverage Licenses	1.0	1.0	1.0
Motor Vehicle	33.5	38.0	36.3
Other	1.0	1.5	1.5
Subtotal Licenses & Permits	35.5	40.5	38.8
Rents & Royalties			
Other Non-Petroleum Rents & Royalties	7.4	7.4	8.0
Coal Royalties	8.2	6.2	6.2
Subtotal Rents & Royalties	15.6	13.6	14.2
Other			
Miscellaneous	23.2	17.9	17.9
Unclaimed Property	3.8	4.0	4.0
Subtotal Other	27.0	21.9	21.9
Total Other Revenue (except Federal & Investment)	402.6	389.3	405.8
Investment Revenue			
Investments	247.4	219.7	181.8
Interest Paid by Others	0.2	1.4	1.4
Total Investment Revenue	247.6	221.1	183.2
Grand Total Unrestricted Revenue	5,831.2	4,777.9	5,236.6

Crude Oil Price Forecast

Oil revenue is projected to provide more than 87% of forecasted General Purpose Unrestricted Revenue through FY 2019. Three elements are critical to the oil revenue forecast: price, volume, and to a lesser extent lease expenditures.

There is no price for Alaska crude oil on the New York Mercantile Exchange (NYMEX)⁽¹⁾ or other commodity exchanges. The price of Alaska North Slope (ANS) crude oil is calculated by subtracting a market differential from the price of West Texas Intermediate

(WTI) quoted on the NYMEX. Four different reporting services estimate that market differential and report a daily spot price for ANS.

All of Alaska's oil production is delivered to refineries on the U.S. West Coast (including Alaska and Hawaii). Consequently, Alaska's royalty and production tax revenue depends in large part on the average market price of ANS crude oil at U.S. West Coast refining centers.

Figure 2-6 shows crude oil prices for FY 2009 and the Department of Revenue's forecast of prices for the 10-year period beginning with the current fiscal year FY 2010 and continuing through FY 2019. The oil price forecast is based on a subjective assessment of market dynamics and trend analysis by participants at a Department of Revenue price forecasting session and other commercial price forecasting sources.

Figure 2-6. Nominal WTI, ANS West Coast and ANS Wellhead, FY 2009 and Forecasted FY 2010-2019 (\$ per barrel)

Fiscal Year	WTI	ANS West Coast	ANS Wellhead
2009	69.71	68.34	61.86
2010	68.71	66.93	61.03
2011	78.85	76.35	70.36
2012	86.43	83.93	77.78
2013	88.74	86.24	80.02
2014	91.11	88.61	82.27
2015	93.55	91.05	84.57
2016	96.05	93.55	86.89
2017	98.63	96.13	89.22
2018	101.27	98.77	91.54
2019	103.99	101.49	93.84

⁽¹⁾ The NYMEX futures market is one source for a WTI quote. Several reporting services also report a daily WTI price quote.

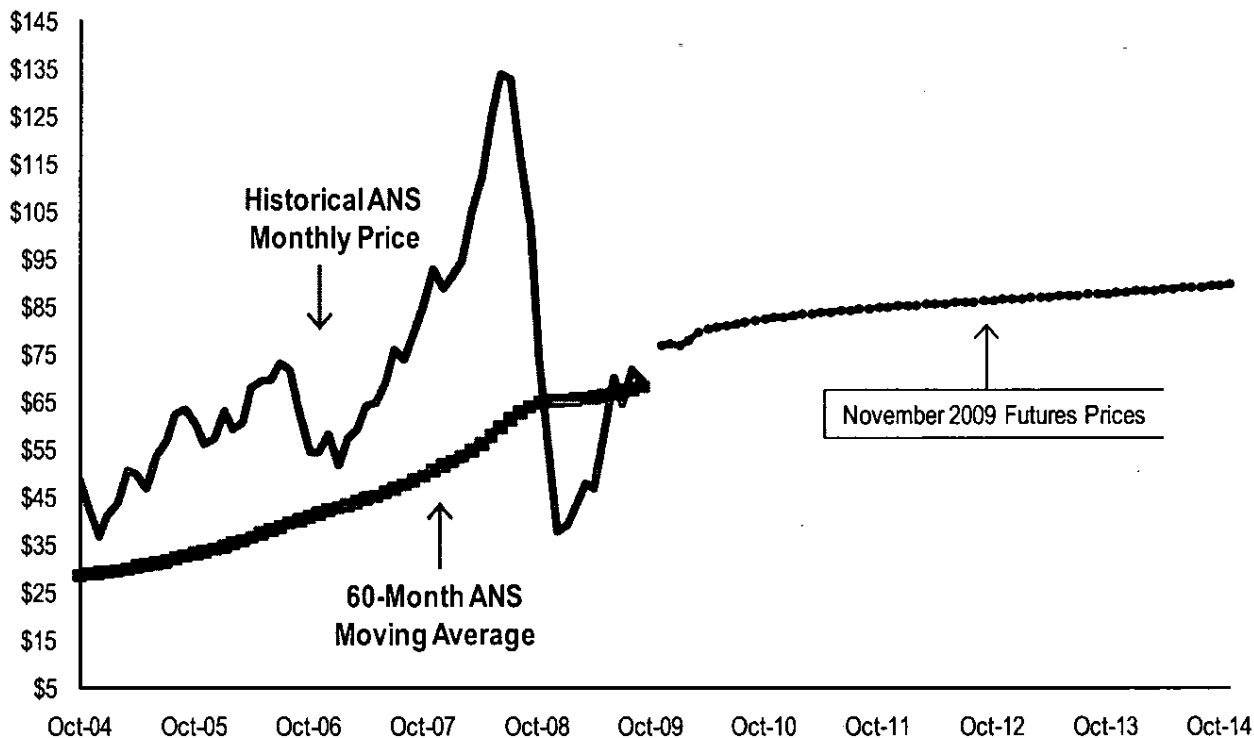
Figure 2-7 shows: (1) the monthly ANS West Coast market price from November 2004, through October 2009, (2) the 60-month moving average of the ANS West Coast market price for the same period and (3) estimated ANS futures price for December 2009 to December 2014.

The figure illustrates a number of issues with respect to oil prices:

- Month-to-month crude oil price volatility—monthly ANS West Coast prices during this time period ranged from \$36.66 per barrel to \$133.78 per barrel.
- The 60-month moving average is \$68.44 per barrel and has more than doubled since 2004.
- Futures prices from November 2009 are dramatically lower than July 2008 record highs, but higher than the 60-month moving average.

We project that ANS oil prices will average \$66.93 per barrel in FY 2010, \$76.35 per barrel in FY 2011 and \$83.93 per barrel in 2012 in nominal dollars. ANS oil prices are projected to increase at approximately 2.75% per year starting in FY 2013, based on inflation.

Figure 2-7. Monthly Nominal ANS West Coast and Futures Oil Prices (\$ per barrel)



**Figure 2-8. Alaska Crude Oil and NGL Production, FY 2009 and Forecasted FY 2010-2011
(million barrels per day)**

	History	Forecast	
	FY 2009	FY 2010	FY 2011
Alaska North Slope			
Prudhoe Bay ⁽¹⁾	0.290	0.280	0.261
Aurora	0.008	0.007	0.007
Borealis	0.014	0.013	0.014
Midnight Sun	0.002	0.001	0.001
Orion	0.010	0.009	0.010
Polaris	0.004	0.004	0.005
Lisburne ⁽²⁾	0.008	0.008	0.007
Niakuk	0.004	0.004	0.003
Point McIntyre	0.025	0.023	0.021
Raven	0.001	0.001	0.001
Kuparuk	0.106	0.099	0.091
Meltwater	0.002	0.002	0.002
Tabasco	0.002	0.002	0.002
Tarn	0.014	0.014	0.015
West Sak ⁽³⁾	0.018	0.019	0.017
Milne Point ⁽⁴⁾	0.021	0.020	0.020
Schrader Bluff	0.010	0.009	0.008
Endicott ⁽⁵⁾	0.014	0.014	0.012
Badami	0.000	0.000	0.000
Alpine ⁽⁶⁾	0.063	0.057	0.056
Fiord ⁽⁷⁾	0.021	0.029	0.029
Nanuq ⁽⁸⁾	0.022	0.013	0.009
Oooguruk	0.004	0.008	0.010
Nikaitchuq	0.000	0.000	0.006
Northstar	0.027	0.020	0.016
Total Alaska North Slope	0.692	0.659	0.623

increase/decrease from prior period	(0.024)	(0.033)	(0.036)
% change from prior period	(3.3%)	(4.8%)	(5.4%)

Total Cook Inlet⁽⁹⁾	0.010	0.009	0.008
---------------------------------------	--------------	--------------	--------------

increase/decrease from prior period	(0.004)	(0.001)	(0.001)
% change from prior period	(27.2%)	(13.1%)	(12.0%)

Total Alaska⁽⁹⁾	0.702	0.668	0.631
-----------------------------------	--------------	--------------	--------------

increase/decrease from prior period	(0.028)	(0.035)	(0.037)
% change from prior period	(3.8%)	(4.9%)	(5.5%)

⁽¹⁾ Includes NGLs

⁽⁴⁾ Includes Sag River & Ugnu

⁽⁷⁾ Includes Fiord-Kuparuk

⁽⁸⁾ Includes Nanuq-Kuparuk

⁽²⁾ Includes West Beach

⁽⁵⁾ Includes Sag Delta

⁽⁹⁾ Percent change calculation may vary from calculation using production amounts due to rounding

⁽³⁾ Includes Northeast West Sak

⁽⁶⁾ Includes Qannik

Crude Oil Production Forecast

Alaska North Slope crude oil production peaked at 2.006 million barrels per day in FY 1988 and has steadily declined since. We anticipate volumes will decline by 4.8% in FY 2010 to about 0.659 million barrels per day. For FY 2011, we project a 5.4% decrease in North Slope production. More discussion of the Fall 2009 oil production forecast can be found in Section 4. Oil Revenue. Also, a detailed field-by-field production forecast is included in the appendices of this forecast.

Crude Oil Expenditures Forecast

A third component of oil revenue forecasting is the expenditures forecast. Under the new ACES production tax, companies are allowed to deduct certain lease expenditures from the

gross value of their production before applying the tax rate. Future tax collections, therefore, are dependent not only on the oil price and the level of production, but on the cost of that production. Costs of production may include fixed and variable operating expenses, such as labor costs and the expense to run a facility, and they may include costs to acquire production equipment or to drill a well—usually deemed to be capital expenses. A portion of capital expenses is also allowed as a credit against the ACES production tax.

Lease expenditures for the exploration for, and production of, crude oil have risen over the three-year period that they have been reported. In FY 2007, over \$3.6 billion was spent producing and exploring for oil on the North Slope. In FY 2008, reported expenditures totaled \$4.6 billion, and in FY 2009, reported expenditures totaled \$4.9 billion. It is important to note that these are unaudited lease expendi-

tures. We project spending in FY 2010 to moderate somewhat, partially due to cost reductions attributable to operational efficiencies and lower costs, with a total of \$4.5 billion. For FY 2011, we expect capital spending to increase, with totals reaching \$5 billion. These spending estimates are contingent on oil prices staying at current levels or increasing.

Long-Term Unrestricted Revenue Outlook

Using the price, volume and lease expenditure components developed for this fall forecast, Figure 2-9 summarizes the department's forecast of total General Purpose Unrestricted Revenue through FY 2019.

Figure 2-9. Total General Purpose Unrestricted Revenue, FY 2009 and Forecasted FY 2010-2019 (\$ million)

Fiscal Year	Unrestricted Oil Revenue	Unrestricted Other Revenue (except Federal & Investment)	Unrestricted Investment Revenue	Total Unrestricted Revenue	Percent From Oil
2009	5,181.0	402.6	247.6	5,831.2	89%
2010	4,167.5	389.3	221.1	4,777.9	87%
2011	4,647.7	405.8	183.2	5,236.6	89%
2012	4,972.7	417.4	183.2	5,573.3	89%
2013	5,329.0	419.4	183.2	5,931.6	90%
2014	5,722.9	434.1	183.2	6,340.2	90%
2015	5,772.0	444.7	183.2	6,399.8	90%
2016	5,532.0	455.5	183.2	6,170.7	90%
2017	5,477.7	459.3	183.2	6,120.1	90%
2018	5,399.1	487.3	183.2	6,069.5	89%
2019	5,321.6	498.0	183.2	6,002.7	89%

Spending, Revenue Forecast and the Constitutional Budget Reserve Fund

As approved by voters in 1990, all receipts from mineral tax and royalty settlements are deposited into the Constitutional Budget Reserve Fund (CBRF). The state has deposited about \$14.3 billion into the fund and generated another \$1.9 billion in investment earnings. Through September 30, 2009, approximately \$3.9 billion had been borrowed from the CBRF to balance the budget and another \$4.1 billion had been spent through direct appropriations. During the years of FY 2007, 2008, and 2009, all borrowed funds were repaid from the General Fund into the CBRF. The net asset value in the CBRF as of September 30, 2009 was about \$8.3 billion. Since the increase in oil prices beginning in 2003, no significant CBRF withdrawals were necessary to balance the state's budget, however given price volatility and the decline in expected oil volumes from the North Slope, the state may have to depend on the CBRF in the future.

Figure 2-10 is presented to help the reader understand the time period in which the CBRF could be depleted, based on the current revenue forecast and the assumption that all excess revenue would be deposited into the CBRF. This figure shows that, given the current revenue forecast and up to 10% in budget growth from FY 2010, the CBRF would not be depleted before 2020. If oil prices were to fall below our forecasted level and stay at that low level, we expect the CBRF to be depleted as early as July 2014, if the budget increases at a rate of 10% per year. If oil prices were to decline to an annual average of \$50 per barrel, and the budget increases at 3% per year, the CBRF could be depleted by July 2017.

Figure 2-10. CBRF Run-Out Date With Revenue Surpluses Deposited into CBRF

Annual State Budget (% change)	Fall 2009 Oil Price Forecast ⁽¹⁾	Fiscal Model of Oil Revenue & CBRF Performance at Selected Prices (\$ per barrel) ⁽²⁾					
		\$40	\$45	\$50	\$55	\$60	\$65
+10%	Dec-2020	Jul-2014	Jan-2015	Sep-2015	Sep-2016	Apr-2018	Feb-2020
+5%	Dec-2020	Dec-2014	Sep-2015	Oct-2016	Jul-2018	Dec-2020	Dec-2020
+4%	Dec-2020	Jan-2015	Dec-2015	Feb-2017	Feb-2019	Dec-2020	Dec-2020
+3%	Dec-2020	Mar-2015	Feb-2016	Jul-2017	Nov-2019	Dec-2020	Dec-2020
+2%	Dec-2020	May-2015	May-2016	Dec-2017	Dec-2020	Dec-2020	Dec-2020
+1%	Dec-2020	Jul-2015	Sep-2016	Aug-2018	Dec-2020	Dec-2020	Dec-2020
Baseline Fall Forecast	Dec-2020	Oct-2015	Feb-2017	May-2019	Dec-2020	Dec-2020	Dec-2020
-1%	Dec-2020	Nov-2015	Jun-2017	Jun-2020	Dec-2020	Dec-2020	Dec-2020
-2%	Dec-2020	Mar-2016	Jan-2018	Dec-2020	Dec-2020	Dec-2020	Dec-2020
-3%	Dec-2020	Jun-2016	Sep-2018	Dec-2020	Dec-2020	Dec-2020	Dec-2020
-4%	Dec-2020	Nov-2016	Oct-2019	Dec-2020	Dec-2020	Dec-2020	Dec-2020
-5%	Dec-2020	Apr-2017	Dec-2020	Dec-2020	Dec-2020	Dec-2020	Dec-2020
-10%	Dec-2020	Dec-2020	Dec-2020	Dec-2020	Dec-2020	Dec-2020	Dec-2020

Baseline Expenditure Forecast (\$ million)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
\$4,350	\$4,700	\$4,700	\$4,700	\$4,700	\$4,700	\$4,700	\$4,700	\$4,700	\$4,700	\$4,700	\$4,700

⁽¹⁾ See Figure 2-6 for the Fall 2009 ANS oil price forecast used in the highlighted scenario.

⁽²⁾ Matrix allows reader to select specific fiscal year price (from FY 2011-beyond) to determine CBRF exhaustion date. Fall 2009 forecasted production volumes are used. A date of Dec-2020 indicates that the CBRF does not run out during matrix timeframe.



Revenue Sources Book

Alaska Department of Revenue – Tax Division

FALL 2009

3. The Constitutional Budget Reserve Fund: Its Purpose, History and Use

Boom and Bust History of Natural Resource Revenues

For all of recorded history, Alaska has been a resource extraction state. From sea otter fur to timber, to gold, and finally to oil and natural gas, Alaskans have relied on natural resources as the major economic driver in the state. Because of its economic dependence on natural resources, Alaska has had a long history of boom and bust cycles.

As early as 1778, Captain Cook observed that traders would likely find a lucrative market for sea otter pelts or “sea-beaver” as they were called at the time. In fact, Captain Cook went so far as to call the sea otter pelts “soft gold.”⁽¹⁾ Fur from sea otters and seals did indeed become a major source of revenue for Alaskan traders. Yet less than fifty years after Captain Cook

correctly predicted the value of the sea otter trade in Alaska, a “fur boom” ensued and sea otters were hunted to virtual extinction.⁽²⁾ This pattern of discovery of a resource in commercial quantities, followed by a subsequent rush to harvest the resource and ultimately the depletion of the resource, sadly played out again and again in Alaska over the next hundred years. Gold caused the next natural major resource boom for Alaska only to crash in the early 1940s. Fishing, specifically salmon, was a leading source of revenue for the Alaskan economy during World War II.

Another significant source of revenue in Alaska is federal spending, especially military spending. During World War

II, over a billion dollars in federal money flowed into the state over a relatively short period of time, leading some to refer to the period as a “defense rush.” Yet Alaska experienced a painful contraction within a few years of the end of World War II.

While federal revenues were flowing into the state at a record pace, tax revenues from the two leading sources of government revenue, fishing and mining, were dropping. Revenues from fishing and mining dropped so dramatically in the 1940s that by 1948, alcohol taxes had overtaken fishing and mining to become Alaska’s main source of revenue.⁽³⁾ At the same time, spending for state services skyrocketed, leaving Alaska with a multi-million dollar budget shortfall in 1947.

⁽¹⁾ Barnett, James K. *Captain Cook in Alaska and the North Pacific*, Todd Communications, Anchorage, Alaska, 2008.

⁽²⁾ *ibid.*

⁽³⁾ Cole, Terrance. *Blinded by Riches: The Permanent Funding Problem and the Prudhoe Bay Effect*. University of Alaska Institute of Social and Economic Research. Anchorage, Alaska, 2004.

Over the years there were numerous discussions of the need to stabilize revenues and protect Alaska from the boom and bust cycles associated with reliance on natural resources, but there never seemed to be enough of a surplus or a willingness to save until oil was discovered in Alaska in world-class quantities.

The Permanent Fund

By the late 1970s, numerous groups and individuals had pointed out the need for Alaska to establish a savings fund to protect against swings in commodity prices for natural resources. As early as 1941, then Territorial Governor Ernest Gruening called for a budget stabilization fund to guard against the revenue volatility experienced by a natural resources dependent economy.⁽⁴⁾

Gruening's dream of an "Alaska fund" came true in the form of the Alaska Permanent Fund. While one purpose of the Permanent Fund was arguably to create a "rainy day account" for government spending when oil revenues dwindled, it has not been used for that purpose. Former Governor Jay Hammond is credited with the idea of generating public support for protecting the Alaska Permanent Fund by paying out dividends to Alaskans. The idea has been quite effective.

While legislators may appropriate money from the earnings of the Alaska Permanent Fund for government projects, the dividend program has made any dipping into the Alaska Permanent Fund for purposes other than dividends extremely controversial.

The 1980s Bust and Impetus for CBR

In the mid-1980s, roughly a decade after the Alaska Permanent Fund was established, Alaska experienced another severe resource bust as the price of oil dropped to roughly \$10 per barrel, bringing widespread foreclosures and bankruptcies to Alaska.

The 1980s bust was the same painful story Alaskans weathered through for over a century: resources flowed in and government spending grew, resources played out or values dropped and suddenly Alaskans were faced with a tremendous shortfall. As the individual income tax and several other state taxes were repealed in 1979-1980 as a result of soaring oil revenues, taxes paid by Alaskan residents plummeted. As Stephen Jackstadt and Dwight Lee noted, "real taxes paid to the state by individual Alaskans after 1980 were only 14 to 16 percent of the real taxes they paid during fiscal year 1976."⁽⁵⁾

Revenues were declining and state spending was expanding. Over the seven years from 1981 to 1988, state spending increased almost 2,000% with state spending representing approximately \$70,000 per Alaskan.⁽⁶⁾

Statutory Budget Reserve

In 1986 as the Alaskan economy cratered under the pressure of \$10 per barrel oil, the legislature created another "rainy day" account: the Statutory Budget Reserve. The Statutory Budget

Reserve was created to cover General Fund shortfalls using "excess revenues" from more profitable years.

The Alaska Legislature seeded the Statutory Budget Reserve with the balance of the remaining General Funds at the end of fiscal year 1991, \$696.3 million.⁽⁷⁾ By fiscal year 1994, the legislature had appropriated all of the money in the Statutory Budget Reserve leaving it with a zero balance. However, in 2008 the Legislature deposited approximately \$1 billion in the Statutory Budget Reserve, which remains in the account today.

The Statutory Budget Reserve served its purpose for a short period of time before lying empty for over a decade. There was concern among some state legislators that the problem with the Statutory Budget Reserve was that funds were available through a simple majority vote. Some felt the Statutory Budget Reserve was doomed to fail because the money in the fund was simply too easy to spend.

Constitutional Budget Reserve History and Passage

The statutory reserve fund alone was not sufficient to protect Alaska from declining oil production and volatile prices. In the late 1980s, Alaskan legislators began discussing the idea of creating another budget reserve to be enshrined in the Alaska Constitution. The concept of the Constitutional Budget Reserve (CBR) as we know it today (an account containing oil and

⁽⁴⁾ Cole, Terrance. *Blinded by Riches: The Permanent Funding Problem and the Prudhoe Bay Effect*. University of Alaska Institute of Social and Economic Research. Anchorage, Alaska, 2004.

⁽⁵⁾ Jackstadt, Stephen L., and Dwight R. Lee. "Economic Sustainability: The Sad Case of Alaska." *Society*. Vol. 32 Issue 3. 1995.

⁽⁶⁾ *ibid.*

⁽⁷⁾ State of Alaska, Department of Revenue, Treasury Division. *Investment Policies and Procedures*. Ver. 3.0. Juneau, Alaska. 2007.

gas settlements from which appropriations generally require a three-quarter majority vote) came about as the state was considering the possibility of a large windfall from an oil settlement. Currently, CBR funds consist of revenues from the settlement of litigation over mineral taxes and royalties and the interest earned on those funds.

The legislation that created the CBR was sponsored by Senator Jan Faiks. Senator Faiks was the Chair of the Senate Judiciary Committee at the time and had just finished two years as the first female president of the Alaska State Senate from 1987 to 1988. Although Senator Faiks was the prime sponsor of the bill that created the CBR, the legislature changed the bill, which was ultimately combined with elements of a House Finance bill shepherded by Representative Kay Brown.

Originally, Senator Faiks' bill contained a number of provisions related to budgeting, one of which was labeled the Budget Stabilization Fund. Several other major sections in Faiks' bill were removed through the committee process including a constitutional spending limit to accompany the budget stabilization fund.

Today, under most circumstances the legislature can appropriate funds from the CBR only with a three-quarters majority vote. However, it is possible to make appropriations from the CBR with a simple majority vote under certain circumstances as provided in section 17(b) of the Constitution, and the legislature did so in 2003. Withdrawals from the CBR are required to be repaid.

The CBR was established in 1991,

and since that time more than a dozen pieces of legislation have been introduced that would amend or change the CBR. However, the only significant changes to the CBR have been the asset allocation and the establishment of the CBR sub-account, a separate fund invested and managed with a longer time horizon than the main fund.

The CBR has been used heavily since 1991 and its exhaustion date is regularly forecasted as part of the official fall revenue forecast each year. There have been warnings that the State of Alaska will face a "fiscal gap" when the CBR is exhausted.

CBR Legislative and Balance History

Mary Halloran of the Governor's Office of Management and Budget summed up the impetus for the legislation in her comments before the Senate Finance Committee, which ultimately authorized the Constitutional Budget Reserve: "In mentioning the outstanding oil and gas litigation, [Halloran] said that, though the timeline is uncertain, it looks like the State could have some 'windfalls' during the next five years. [Halloran] said the Legislature has taken some very strong steps over the last couple of years to try to stabilize the spending limit, but there are still a number of programs 'out of control.'"⁽⁸⁾

Former Senator Jan Faiks recalled the passage of Senate Joint Resolution 5 (SJR 5) and creation of the CBR reserve as a bipartisan effort: "The decision was contentious because hardly anyone wanted to change the

terms and conditions of the original Permanent Fund without approval from the people. So most Senators... insisted on another statewide vote and I think most House members agreed; thus, it was a bipartisan decision to propose a constitutional amendment. The Governor [Cowper] gets credit for recognizing the state had a real financial problem and he wanted to find a permanent solution. We knew the current situation of relying on the ups and downs of oil revenues was not good for either state or local governments. A bipartisan solution had to be found."⁽⁹⁾

Originally, SJR 5 was an updated version of a bill that had passed the Senate nearly unanimously in 1987. The bill called for a 50-30-20 distribution of the income of the Permanent Fund. Fifty percent of the Permanent Fund's earnings would have gone to the payment of dividends, thirty percent to inflation proofing and twenty percent to a budget stabilization fund. The twenty percent of earnings in Senator Faiks' bill as originally introduced eventually became the CBR as we know it today. One major piece of Senator Faiks' bill that was removed in the process was an appropriation limit. Another was a sunset clause under which the constitutional amendment would have expired after five years.

Just getting the bill out of the Senate was a challenge, even for the former Senate President Faiks. After failing to pass once and being returned to the Rules Committee on a motion by Senator Arliss Sturgulewski, SJR 5 was reported out of the Rules Committee and brought to the Senate Floor under a supplemental calendar on April 18,

⁽⁸⁾ Testimony of Mary Halloran. 16th Alaska State Legislature, Senate Finance Committee. February 2, 1990. Transcribed by Alaska Legislative Records Dept.

⁽⁹⁾ Faiks, Jan. "CBR." Email to Department of Revenue. November 10, 2009.

1990. The bill passed the Senate by a vote of 15-5 with Senators John Binkley and Michael Szymanski switching their votes to support passage.

Meanwhile, in the State House of Representatives, a bill with similar intent was making progress. House Joint Resolution 66 (HJR 66), while nominally sponsored by the House Finance Committee, was heavily supported by Representative Kay Brown. In fact, the legislative record describes Representative Brown as the Prime Sponsor of HJR 66. Co-Chairman of the House Finance Committee Ron Larson explained that the bill, "...evolved from the House Finance Fiscal Policy Subcommittee, chaired by Representative Brown, and was modified by the House Judiciary Committee."⁽¹⁰⁾ The two bills (SJR 5 and HJR 66) finally collided

in May of 1990 in the House Finance Committee.

As is often the case with two pieces of similar legislation introduced separately in the House and Senate, the first bill to pass its respective house of origin typically becomes the "vehicle" or version to pass into law. In this case, SJR 5 by Senator Faiks had already passed the Senate and was assigned to the House Finance Committee for a hearing. HJR 66 never passed the House. However, the language from HJR 66 relating to the budget reserve, including the use of the term "budget reserve" rather than "budget stabilization fund" as it was referred to in SJR 5, was incorporated into SJR 5. Representative Brown testified before the House Finance Committee that the language in SJR 5 was nearly identical to the language in HJR

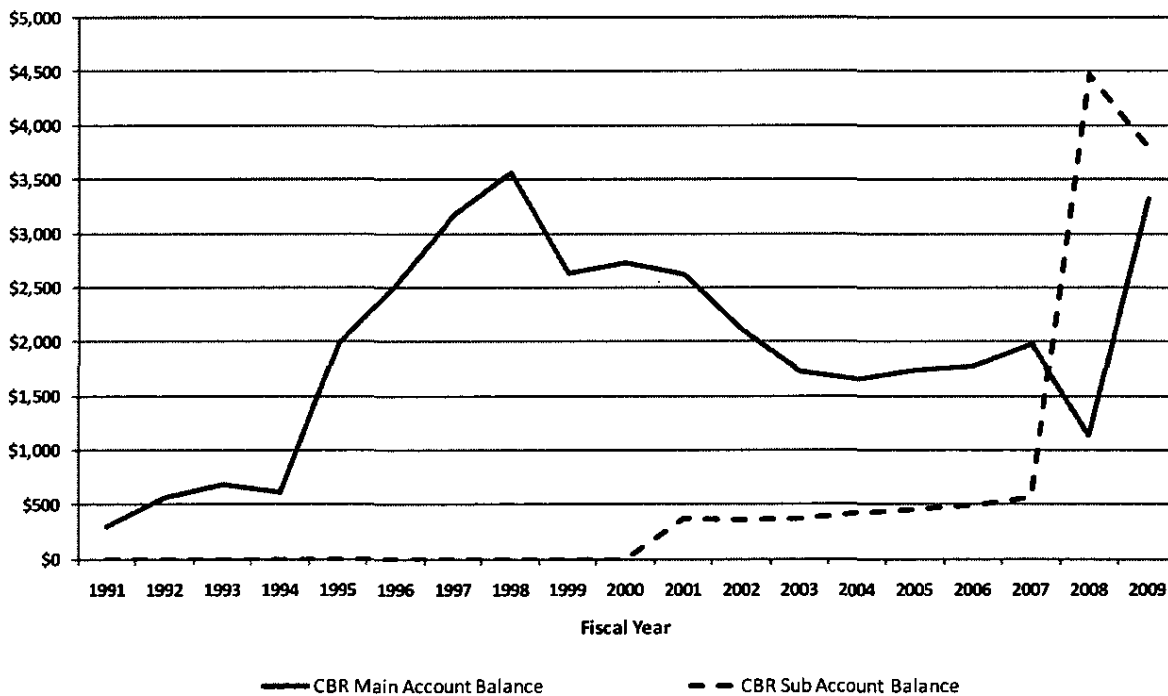
66 after the House Finance Committee had amended SJR 5.

In essence, SJR 5 was amended in the House to reflect the language of HJR 66. In the process, the spending limit in SJR 5 was eliminated. Numerous legislators and the Alaska Public Employees Association, a public employees union, opposed the constitutional spending limit.⁽¹¹⁾ Because the spending limit was deemed not politically viable, it was removed.

The Senate concurred with the House in a vote of 15-5 on May 8, 1990. The bill was sent to the governor on May 24, 1990, for signature. Governor Steve Cowper signed the bill almost exactly two months later on July 23, 1990.

Despite the passage of SJR 5 and the creation of the CBR, some question

Figure 3-1. Balance of the Constitutional Budget Reserve Main Account and Sub Account (\$ million)



⁽¹⁰⁾ Testimony of Ron Larson. 16th Alaska State Legislature, Senate Finance Committee. May 1, 1990. Transcribed by Alaska Legislative Records Dept.

⁽¹¹⁾ Testimony of Margaret Branson and Fran Ulmer. 16th Alaska State Legislature, Senate Finance Committee. May 1, 1990. Transcribed by Alaska Legislative Records Dept.

remained about which funds were to be deposited into the CBR. Former Governor Cowper and a number of legislators sued then Governor Wally Hickel, Department of Revenue Commissioner Darrel Rexwinkle and the State of Alaska in 1993 to dispute the State's interpretation of "administrative proceeding." Former Governor Cowper and the legislators argued that the State had been improperly depositing funds received during the informal conference stage of dispute⁽¹²⁾ into the General Fund when they should have been deposited into the CBR. The Alaska Superior Court ruled in favor of former Governor Cowper and required the state to properly fund the CBR, with interest and foregone earnings, by the end of the regular session of the 18th Alaska Legislature in 1994.⁽¹³⁾

In another instance, nearly a billion dollars in funds which should have been deposited in the CBR were spent instead. When oil companies ARCO, Unocal, BP Exploration and Chevron agreed to pay the state \$1.7 billion to settle long-running disputes over payments of back taxes and royalties in 1992 and 1993, the governor and legislature appropriated over half the amount. By spending this settlement rather than saving it, the state was able to maintain overall spending and more than double capital spending, from \$300 million to \$616 million.⁽¹⁴⁾

Historically, funds from the CBR

were usually appropriated for general purposes. However, the CBR has also been used to fund specific programs in a number of instances. For example, a 2004 legislative research report listed the following expenditures from the CBR for specific programs: expenditures for oil and gas litigation and state title to oil and gas lands, capitalization of the Alaska Mental Health Trust, Y2K assessment, compliance, and remediation, and establishment of the Power Cost Equalization endowment fund.⁽¹⁵⁾

Figure 3-1 illustrates the history of the balances in the Constitutional Budget Reserve and the sub-account of the CBR from the first deposit through fiscal year 2009. Figures 3-2 and 3-3 illustrate the balance of each the Constitutional Budget Reserve and the Constitutional Budget Reserve sub-account with contributions and withdrawals by year. Figure 3-4 presents this information in tabular form.

CBR as a Stabilization Fund or Alternative to Hedging

The CBR as it exists today functions as a budget stabilization fund in the same manner as funds in many other states and oil producing nations. Like many resource producing states, the State of Alaska is exposed to tremendous commodity price risk. This is a difficult

position for a government as expenses typically cannot be scaled back as quickly as revenues fall.

As a result of commodity price exposure, a number of resource producing states and nations from Texas to Mexico have actively hedged oil prices. The State of Alaska has studied hedging oil prices on a number of occasions with the most detailed discussion occurring in 2002 under the direction of Department of Revenue Commissioner Wilson Condon. In its hedging report, the Department of Revenue raised some concerns with using the CBR to protect the State from commodity price volatility, but also recognized the role the CBR plays in smoothing state revenues. However, because the CBR already insulates the state from the volatility of commodity prices, the report concluded that hedging oil prices was not ideal until the CBR was depleted or nearly depleted.⁽¹⁶⁾

"Alaska has not yet needed to pay the costs or take the risks of hedging its future oil revenues because our cushion against fluctuating oil prices for the past decade has been the Constitutional Budget Reserve Fund (CBRF). The fund was established a decade ago for exactly that purpose — to fill the gap between a fluctuating revenue source and a constant need for public services," wrote the Department in 2002.⁽¹⁷⁾

¹²⁾ The informal conference stage is the appeal to the regulatory agency.

¹³⁾ State of Alaska, Legislative Audit Division. *Audit of Natural Resources and Department of Revenue: Constitutional Budget Reserve Fund*. By Welker Randy. Juneau, Alaska. 1994.

¹⁴⁾ Jackstadt, Stephen L., and Dwight R. Lee. "Economic Sustainability: The Sad Case of Alaska." *Society*. Vol. 32, No. 3. March 1995.

¹⁵⁾ State of Alaska, Legislative Research Division. *Appropriations from the Constitutional Budget Reserve Fund for Special Purposes*. By Kathleen Wakefield. Juneau, Alaska. 2004.

¹⁶⁾ State of Alaska, Department of Revenue. *Hedging Oil Revenues: What Is It? When Should Alaska Do It, If At All? Why Should Alaska Consider It?* Juneau, Alaska. 2002.

¹⁷⁾ State of Alaska, Department of Revenue. *Oil Hedging Summary*. Juneau, Alaska. 2002.

Conclusion

Alaska's economy has always been at the mercy of commodity production and prices. After centuries of exhilarating resource booms followed all too regularly by severe busts, the State of Alaska created a budget stabilization fund in 1990: Alaska's Constitutional Budget Reserve. The CBR was created shortly after a time of economic crisis and with a view toward several large windfall settlements for the state.

Over nearly two decades, the CBR has almost single-handedly staved off massive budget shortfalls. In some years, withdrawals from the CBR reached a billion dollars in nominal terms. Yet the CBR remains vulnerable to prolonged overspending and the potential that oil prices may fall.

While the CBR is still vulnerable to overspending, and has at times appeared on the verge of exhaustion, the fund has acted as a buffer against commodity price volatility for almost two decades and can be expected to do so for the near future.

Figure 3-2. Constitutional Budget Reserve Main Account Contributions/Withdrawals and Balance (\$ million)

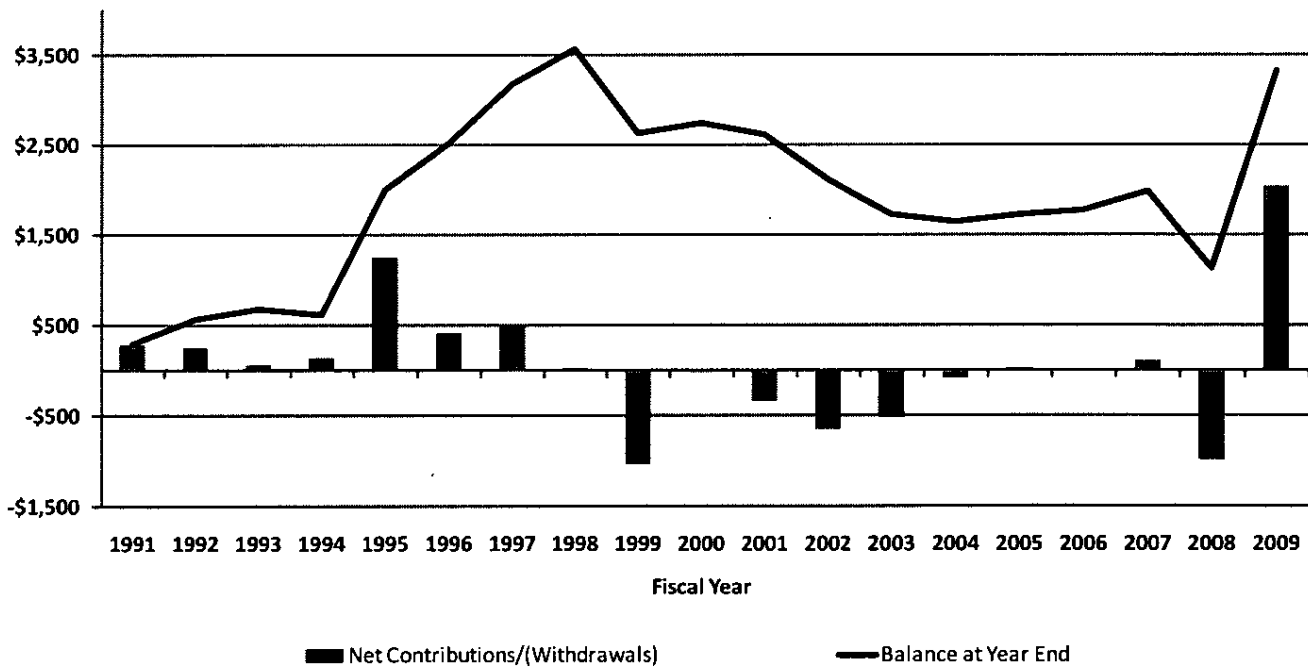


Figure 3-3. Constitutional Budget Reserve Sub-Account Contributions/Withdrawals and Balance (\$ million)

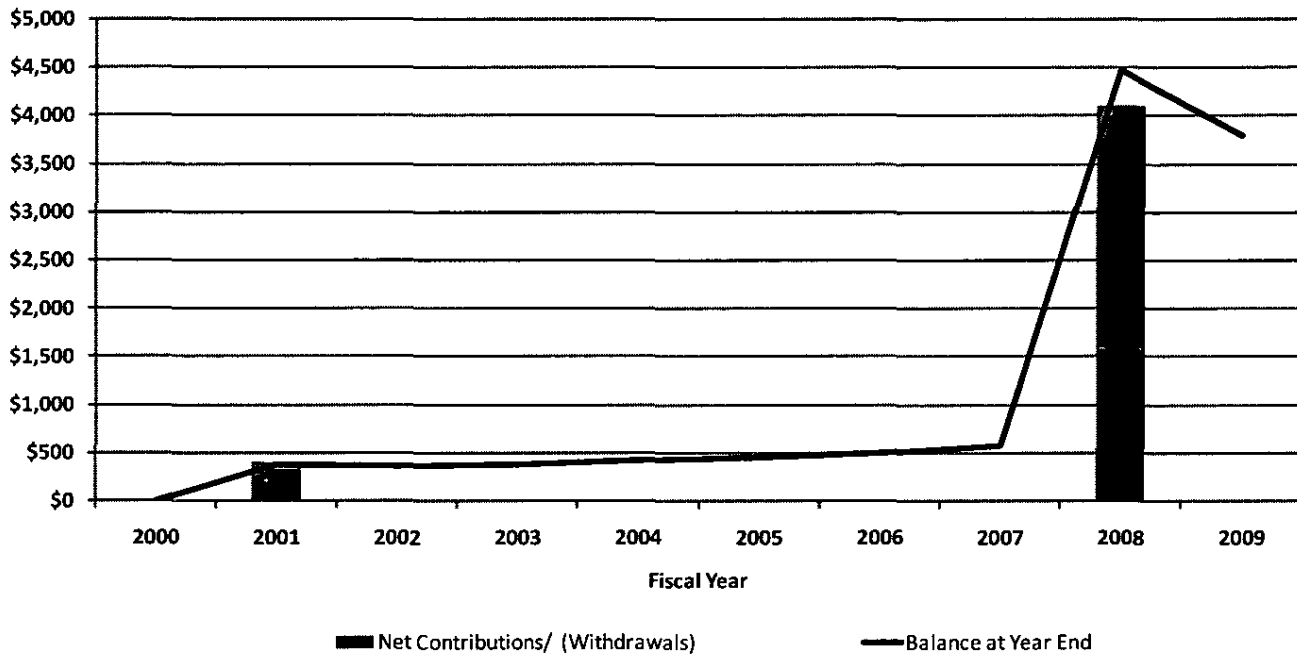


Figure 3-4. Constitutional Budget Reserve Main & Sub-Account Contributions/Withdrawals and Balance (\$ million)

Fiscal Year	MAIN ACCOUNT				SUB-ACCOUNT			
	Beginning Balance	Net Contributions (Withdrawals)	Investment Income	Ending Balance	Beginning Balance	Net Contributions (Withdrawals)	Investment Income	Ending Balance
1991	0.0	291.0	6.0	297.0	0	0.0	0.0	0.0
1992	297.0	247.0	19.0	563.0	0.0	0.0	0.0	0.0
1993	563.0	65.0	57.0	685.0	0.0	0.0	0.0	0.0
1994	685.0	132.0	61.0	614.0	0.0	0.0	0.0	0.0
1995	614.0	1,258.0	122.0	1,994.0	0.0	0.0	0.0	0.0
1996	1,994.0	413.0	111.0	2,518.0	0.0	0.0	0.0	0.0
1997	2,518.0	487.0	167.0	3,172.0	0.0	0.0	0.0	0.0
1998	3,172.0	18.0	369.0	3,559.0	0.0	0.0	0.0	0.0
1999	3,559.0	(1,045.0)	114.0	2,628.0	0.0	0.0	0.0	0.0
2000	2,628.0	(9.0)	115.0	2,734.0	0.0	0.0	0.0	0.0
2001	2,734.0	(342.0)	227.0	2,619.0	0.0	400.0	(24.0)	376.0
2002	2,619.0	(648.0)	143.0	2,114.0	376.0	0.0	(21.0)	355.0
2003	2,114.0	(521.0)	127.0	1,720.0	355.0	0.0	18.0	373.0
2004	1,720.0	(81.0)	8.0	1,646.0	373.0	0.0	45.0	418.0
2005	1,646.0	23.0	62.0	1,731.0	418.0	0.0	36.0	454.0
2006	1,731.0	9.0	34.0	1,774.0	454.0	0.0	39.0	493.0
2007	1,774.0	101.0	106.0	1,981.0	493.0	0.0	75.0	568.0
2008	1,981.0	(987.0)	140.0	1,134.0	568.0	4,100.0	(200.0)	4,467.0
2009	1,134.0	2,040.0	144.0	3,317.0	4,467.0	0.0	(670.0)	3,797.0



Revenue Sources Book

Alaska Department of Revenue – Tax Division

FALL 2009

4. Oil Revenue

Figure 4-1. FY 2009 Oil Revenue: \$6.1 billion

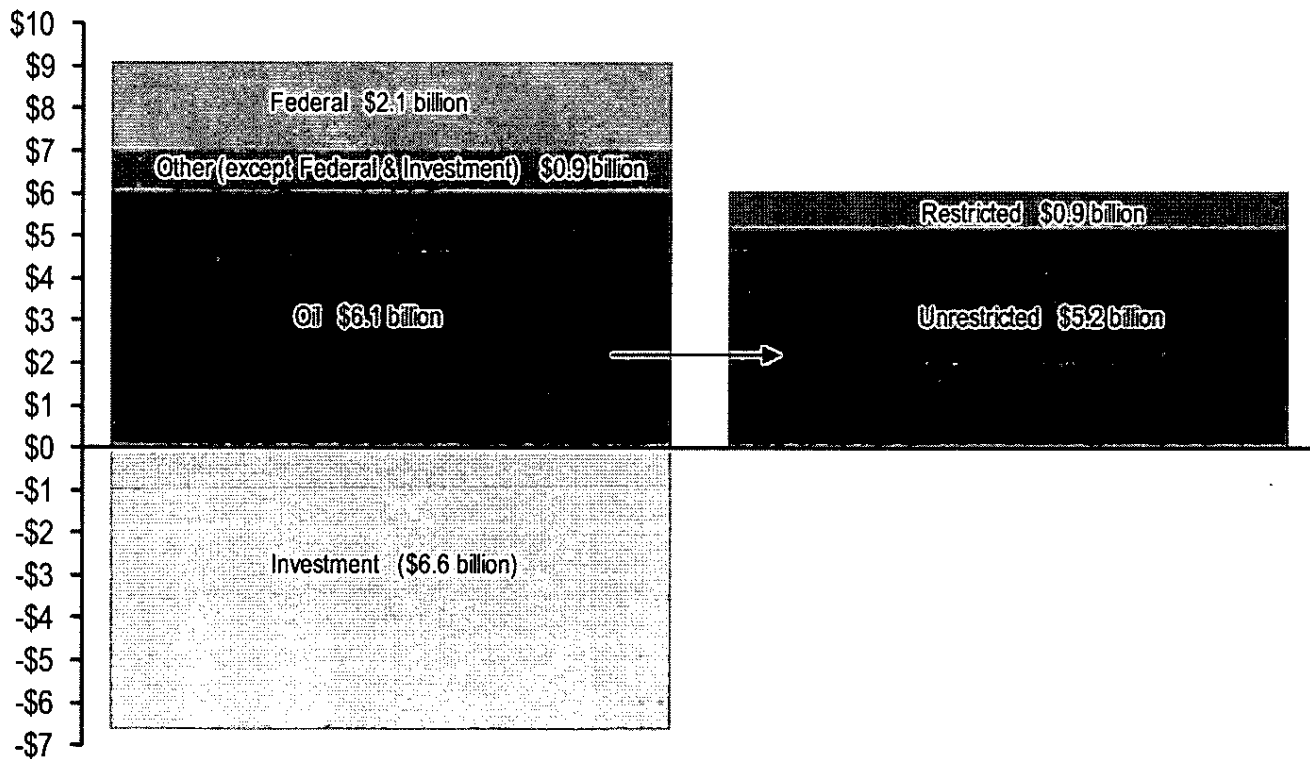


Figure 4-2. Total Oil Revenue, FY 2009 and Forecasted FY 2010-2011 (\$ million)

Oil Revenue

	History	Forecast	
	FY 2009	FY 2010	FY 2011
Unrestricted			
Petroleum Property Tax	111.2	101.1	96.3
Petroleum Corporate Income Tax	492.2	470.0	580.0
Production Tax	3,112.0	2,126.1	2,430.9
Royalties (including Bonuses, Rents & Interest)	1,465.6	1,470.3	1,540.4
Subtotal	5,181.0	4,167.5	4,647.7
Increase/Decrease from Prior Period	(4,775.0)	(1,013.5)	480.2
% Change from Prior Period	(48.0%)	(19.6%)	11.5%
Restricted			
Royalties to Permanent Fund & School Fund	670.8	611.7	683.4
Tax Settlements to CBRF	202.6	440.7	20.0
NPR-A Royalties, Rents & Bonuses	14.8	4.9	4.9
Subtotal	888.2	1,057.3	708.3
Increase/Decrease from Prior Period	(443.9)	169.1	(349.0)
% Change from Prior Period	(33.3%)	19.0%	(33.0%)
Total Oil Revenue	6,069.2	5,224.8	5,356.0
Increase/Decrease from Prior Period	(5,218.9)	(844.4)	131.2
% Change from Prior Period	(46.2%)	(13.9%)	2.5%

Unrestricted Oil Revenue

Figure 4-3. Unrestricted Oil Revenue, FY 2009 and Forecasted FY 2010-2019 (\$ million)

Fiscal Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Petroleum Property Tax	111.2	101.1	96.3	91.9	87.4	83.2	79.3	75.5	71.8	68.2	64.9
Petroleum Corporate Income Tax	492.2	470.0	580.0	600.0	615.0	635.0	645.0	655.0	665.0	670.0	695.0
Production Tax	3,112.0	2,126.1	2,430.9	2,631.5	2,966.8	3,323.2	3,362.8	3,131.5	3,066.5	3,043.9	3,013.7
Royalties-Net ⁽¹⁾	1,465.6	1,470.3	1,540.4	1,649.4	1,659.8	1,681.5	1,684.9	1,670.0	1,674.5	1,617.0	1,548.0
Total Oil Revenues	5,181.0	4,167.5	4,647.7	4,972.7	5,329.0	5,722.9	5,772.0	5,532.0	5,477.7	5,399.1	5,321.6
Increase/Decrease from Prior Period	(4,775.0)	(1,013.5)	480.2	325.1	356.3	393.9	49.0	(240.0)	(54.3)	(78.6)	(77.5)
% Change from Prior Period	(48.0%)	(19.6%)	11.5%	7.0%	7.2%	7.4%	0.9%	(4.2%)	(1.0%)	(1.4%)	(1.4%)

⁽¹⁾ Includes bonuses and interest

General Discussion

The state receives oil and gas revenue from four sources: oil and gas production tax, property tax, royalties and corporate income tax. The bulk of the revenue goes into the General Fund for general purpose spending. With the repeal of HB 11,⁽¹⁾ approximately 30% of oil and gas royalties goes into the principal of the Alaska Permanent Fund and 0.5% goes into the Public School Trust Fund. There also are two other funds that receive specific oil and gas revenues: the National Petroleum Reserve-Alaska (NPR-A) Fund,⁽²⁾ which receives the state's share of all lease bo-

nuses from sales in the NPR-A; and the Constitutional Budget Reserve Fund (CBRF), which receives settlements of tax and royalty disputes between the state and oil and gas producers.

Figure 4-2 shows the actual amount of each tax and royalty source in FY 2009 and the forecast for FY 2010 and FY 2011. As can be seen from the figure, royalties and production tax constitute the largest part—81% for FY 2010—of restricted and unrestricted oil revenue combined. Figure 4-3 shows the department's unrestricted oil revenue forecast

from the current fiscal year through FY 2019 by revenue category.

This section begins with a discussion of production taxes and royalties, both of which are driven by price and volume. We then review the price forecasting methodology that underlies this report, and discuss the linkage between market prices and wellhead values. We also review our production forecast and close this section with a discussion of oil and gas property taxes, oil and gas corporate income taxes and the restricted portions of oil revenue.

⁽¹⁾ For more discussion on deposits to the Permanent Fund and HB 11, see the Executive Summary section.

⁽²⁾ This fund implements a federal requirement that the state use its share of NPR-A oil revenue to satisfy the needs of local communities most affected by development in the NPR-A. For detailed information on this fund, see Section XII-P of Treasury's Investment Policies and Procedure Manual.

Crude Oil and Natural Gas Production Taxes

All oil and gas production in Alaska, except the federal and state royalty share and a small amount used in production operations, is subject to the state's production tax, and to the hazardous release surcharge, which is levied only on crude oil. Taxes and surcharges are estimated and collected on a monthly basis.

The Production Tax Known as "Alaska's Clear and Equitable Share" (ACES)

In November 2007, the Alaska Legislature passed the Alaska's Clear and Equitable Share plan (ACES), which made changes to the state's production tax system, retroactive to July 1, 2007. The previous production tax, known as the Petroleum Profits Tax (PPT), had been in place for one year prior to the passage of ACES. Both production tax systems are based on net profits of oil and gas production (see Figure 4-4). For more than 20 years prior to the enactment of the PPT, the state used a production tax system that was based

on the gross value at the point of production as adjusted by the Economic Limit Factor (ELF).

The ACES tax calculation starts with the value at the point of production, and then subtracts upstream costs, including costs capitalized on company financial statements, from this value to arrive at the "production tax value." Each company that produces oil in Alaska has a production tax value based on this calculation, which is conceptually similar to a company's net profit. The production tax value is multiplied by the tax rate—25%—to arrive at the base tax. Should the production tax value exceed \$30 per barrel of oil produced (or the equivalent in gas), the tax rate increases 0.4% for every dollar the per-barrel production tax value is over \$30. For production tax values greater than \$92.50, the progressivity factor changes to 0.1% for every additional dollar of profit on a barrel of oil. The maximum total tax rate is 75%.

Under ACES, a company's production tax liability is reduced to the extent that it invests in equipment, projects, or other items that are deemed "capital expenditures." Capital expenditures generally include costs related to

the purchase of drilling rigs or other equipment, infrastructure, exploration, and facility expansion. Capital costs are eligible for a 20% credit against the company's ACES liability and the credits must be spread over two years. The 20% capital expenditure credit is intended to encourage investment in Alaska.

ACES also encourages investment in Alaska through three other tax credits. Companies producing less than 100,000 barrels of oil per day may be eligible for a tax credit of up to \$12 million per year. Net losses are eligible for a 25% tax credit in the year following the loss. ACES also expanded the Exploration Incentive Credit, changing the credit rates from 20% and 40% to 30% and 40% of qualified exploration expenditures.

Figure 4-5 shows the credits that companies reported on their annual tax returns filed March 31, 2008 and March 31, 2009. Note that most of the credits were applied against tax liabilities; those that could not be immediately applied against a tax liability will be carried forward or sold to the state or another company.

Figure 4-4. ACES Tax Liability Calculation

$$\text{ACES Tax Liability} = [(\text{Value} - \text{Costs}) * \text{Tax Rate}] - \text{Credits}$$

The terms used in the equation are defined as follows:

Value = Volume of Oil & Gas Produced * Wellhead Value

Costs = Operating Expenditures + Capital Expenditures

Tax Rate = 25% + 0.4% for every \$1 per barrel that this "net profit" exceeds \$30 up to \$92.50, then 0.1%

Credits = (20% * Capital Expenditures)⁽¹⁾ + (20% * Eligible Transition Expenditures)⁽²⁾ + Base Allowance

(1) Spread over two years

(2) Limited to those credits earned while the PPT was in effect and could not be used

The oil and gas tax credit fund, authorized under AS 43.55.028, was created to fund the state's purchase of production tax credit certificates. In FY 2009, the fund paid out \$193 million, and thus far in FY 2010, the fund has paid out \$49 million to purchase credits. As of November 2009, the fund balance was \$138.5 million.

Hazardous Release Surcharge

The Oil and Hazardous Substance Release Prevention and Response Fund was created by the legislature in 1986 to provide a "readily available funding source to investigate, contain, and clean up oil and hazardous releases." An amendment in 1994 divided the fund into two separate accounts comprised of: (1) the Response Account, which requires a surcharge on all oil production, except federal and state royalty barrels, that may be used to finance the state's response to an oil or hazardous

substance release declared a disaster by the governor; and (2) the Prevention Account which is an additional surcharge on all oil production, except federal and state royalty barrels, that may be used for the clean up of oil and hazardous substance releases not declared a disaster by the governor. This account can also be used to fund oil and hazardous substance release prevention programs in Alaska.

The Response surcharge (AS 43.55.201) is \$.01 per taxable barrel of oil and the Prevention surcharge (AS 43.55.300) is \$.04 per taxable barrel of oil produced.

The Response surcharge is suspended when the balance of the Response account is equal to or exceeds \$50 million. As of September 30, 2009, the cumulative balance of the account was \$45.8 million. The Response Surcharge was re-imposed effective April 1, 2007, by the Department of Revenue.

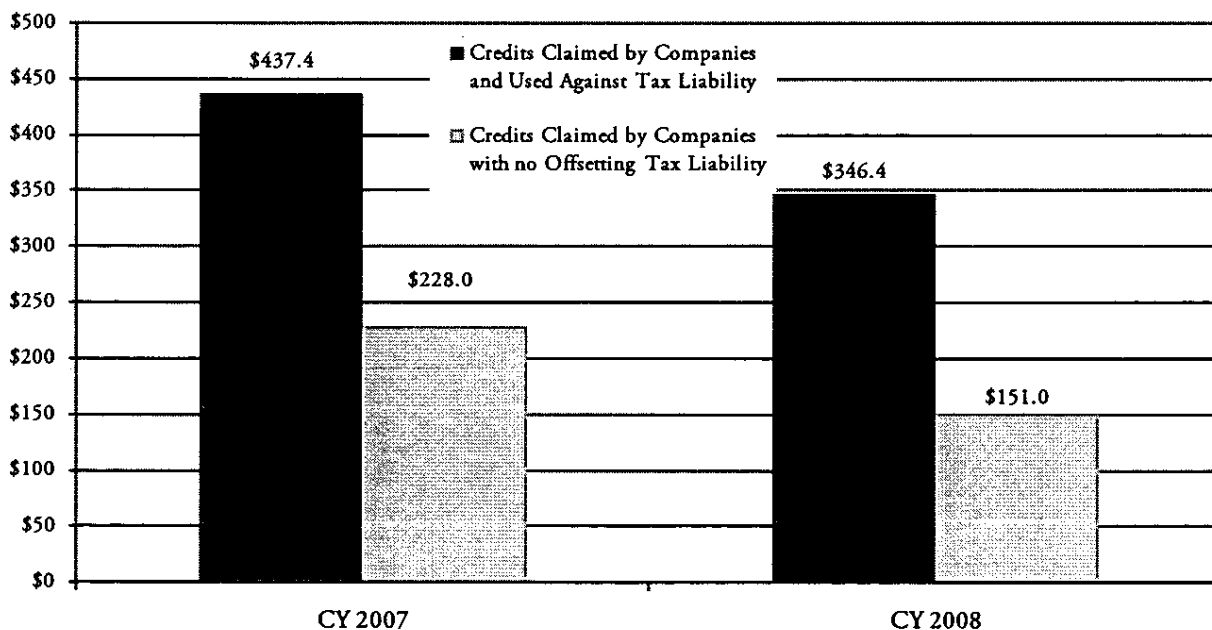
Oil Royalties

Almost all Alaska oil and gas production occurs on state lands leased for exploration and development. As the land owner, the state earns revenue from leasing as: (1) upfront bonuses, (2) annual rent and (3) a royalty interest in oil and gas production.

Typically the state issues leases based on a competitive bonus bid system. The state generally retains a royalty interest of at least 12.5%. The vast majority of current production is from leases that carry that rate. Some currently producing leases carry rates as high as 20%, and some leases also have a net profit-share production agreement.

State oil and gas leases provide that the state may take its oil royalty in barrels (in-kind) or as a percentage of the production value (in-value). In FY 2009, the state took approximately 56,000 barrels per day of North Slope

Figure 4-5. Production Tax Credits Reported, CY 2007 and CY 2008 (\$ million)



production in-kind and sold it to Flint Hills Resources Alaska, LLC for their refinery at North Pole.

The royalty oil taken in-value is valued according to a formula using a market basket of spot crude oil prices closely approximating the ANS West Coast spot price of oil less a transportation allowance back to the lease. Royalties are based on a destination price—the higher of the actual sales price or the prevailing value.⁽³⁾ Pipeline and marine transportation costs are deducted from the destination value to derive the taxable wellhead value of the oil or gas.

Crude Oil Prices, Lease Expenditures, Transportation Costs and Crude Oil Production: Forecasting Methodology & Assumptions

For many years, the level of revenues accruing to the state from oil production have been contingent primarily on oil prices and production volumes. With the implementation of the production tax on net profits, a third factor influences the level of revenues anticipated from oil production—costs related to exploring for, developing and producing oil, all or part of which are deductible and/or creditable under the production tax as “lease expenditures.”

Estimating oil revenue for the state entails projecting four factors:

1. Crude oil prices
2. Lease expenditures

3. Transportation charges
4. Crude oil production

This section reviews each of these factors.

To forecast oil prices, the department conducts a day-long price forecasting session to review and discuss petroleum supply and demand price drivers. The session includes professionals from the Department of Revenue, Department of Natural Resources, Department of Labor, the Governor’s Office of Management and Budget, the Division of Legislative Finance, the University of Alaska and industry experts.

To forecast crude oil production volumes, the Department of Revenue uses an engineering consultant in conjunction with assistance from the Department of Natural Resources and the Alaska Oil and Gas Conservation Commission. The statewide production volume forecast is summed from projections of oil and gas production by field.

To forecast lease expenditures, the department uses data from earlier filings for a base and projects short-term future expenditures from company documents. Mid and long-term expenditure forecasts take into account long-term development plans as detailed in company documents and are intended to coincide with our production forecast.

Transportation charges include tariffs on pipelines, marine transportation and other cost adjustments for moving crude oil to market. ACES allows “reasonable” costs to be subtracted as transportation charges.

Each of these forecasted items play an important role in determining the level of revenue anticipated from oil production. These four items are used as inputs into the department’s revenue model.

More information about expenditures and tax calculations is provided later in this section.

1. Crude Oil Prices

Methodology for Forecasting Prices

The department compiles its oil price forecast from several sources, including a day-long price forecasting session with attendees from various agencies in the state government. Session attendees are asked for their projections for West Texas Intermediate (WTI) crude oil for three cases—a low case, a high case and a base case. The prices are forecast in real 2009 dollars. The Department of Revenue projects the differential between WTI and ANS and uses a projection of inflation to arrive at the nominal dollar forecast used in this publication. Among the other forecasting sources reviewed by the department are those prepared by the Energy Information Administration (EIA), the New York Mercantile Exchange (NYMEX), and industry analysts.

Oil prices were extremely volatile in FY 2009, due in large part to the economic crisis experienced in the U.S. and other developed nations. Although prices have stabilized thus far in FY 2010, there is still a significant amount of uncertainty about whether or not the economy is on a sustained path of recovery and if so, what impact that will have on oil demand and supply. In the 11 months since oil prices reached their recent low of \$25 per barrel (December 2008), prices have rebounded to triple that amount, currently holding fairly steady in the \$70 range for the past six months. Yet, many impacts of the recession continue to be felt, including high unemployment, shaky financial

⁽³⁾ ANS West Coast prevailing value per 15 AAC 55.171 is the monthly average of daily spot market prices reported by Platt’s Oilgram, Reuters and Dow Jones Energy reporting services. This price is published monthly on the Tax Division website at www.tax.state.ak.us.

markets and lower than normal consumer spending. Oil markets are intricately linked to the health of economies in the world and with so much potential for economic volatility still in the mix, it is difficult to predict with any accuracy the direction oil prices will go in the longer term.

Due to these uncertainties, we focused our oil price forecast on the near term, forecasting only out to 2012. Our forecast for the following seven years was held flat in real terms and escalated with inflation. The following observations and assumptions were considered in the preparation of our oil price forecast.

Factors that Influence Oil Prices

Many factors contribute to the pricing of oil on the world market. There are the fundamental economic factors of supply and demand, there are geopolitical events, there are inventory levels and weather-related events. There are other related issues, such as the impact of the financial sector, including commodities trading, and of facility constraints, including refinery capacity and configuration limitations. There is the influence of a strong oil market cartel—OPEC—which strives to keep oil prices within a pre-determined price band by increasing and decreasing supply. These are all factors that help determine the price of oil in the world market, and each of them

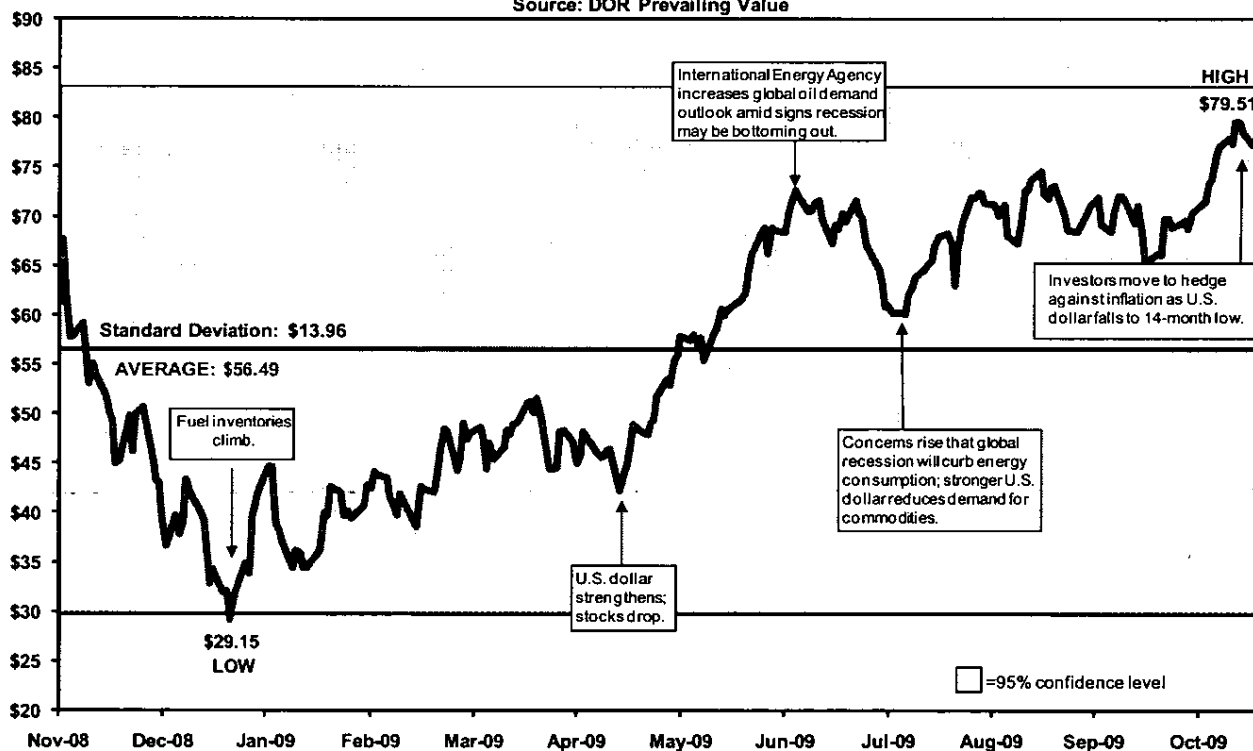
must be considered in forecasting oil prices. At any given time, most of these factors are likely influencing the price of oil. Some of the factors push prices higher and some push them lower.

Oil Price Drivers

The most significant oil price driver for this forecast—both for high and low prices—is the health of the U.S. economy and other developed countries. Since the economy has been cited as the most commonly accepted reason for the crash in oil prices that occurred in late 2008, it should not be surprising that the economy is the most influential factor for oil price movements in the near term. The fact that the economy is the

Figure 4-6. ANS Crude Price Volatility

Alaska North Slope West Coast Price
Daily Oil Prices in Dollars per Barrel and 95% Confidence Level
November 1, 2008 to October 31, 2009
Source: DOR Prevailing Value



Note: 95% confidence level equals two standard deviations, or +/- \$27.92 from the average of \$56.49 per barrel

top reason for oil prices increasing, as well as for oil prices decreasing, reinforces the uncertainty that still exists in the future of the U.S. and other economies. While some notable economists have been quick to declare that the worst of the recession is past us and the economy is on an upward path, others warn of continued market volatility, as well as unemployment and inflation fears.

There have been several measures of positive economic growth in recent months that may help signal the end of the recession. In late October 2009, the Bureau of Economic Analysis (BEA) released an early report that the U.S. gross domestic product (GDP) had increased in the third quarter of 2009—the first such increase since the second quarter of 2008. Also according to the BEA, U.S. personal income was up in the second quarter of 2009, the first increase in a year. With regard to international trade, the BEA reported in the second quarter of 2009 that the deficit in international trade on goods and services declined to its lowest level since 2001. These are all positive economic signs that the worst of the recession could be over in the U.S.

Alternatively, should the U.S. economy slide back into negative growth again, the impact on oil prices could be severe. As the recession deepened in the fourth quarter of 2008, oil prices plunged from over \$90 per barrel to about \$25 per barrel, a 72% decrease. One year later, prices have rebounded as the economy appears to be recovering, but unemployment is the highest it has been in over 25 years. Prolonged unemployment could erode oil demand, sending prices downward again. Any economic impacts felt in the U.S. to some extent carry over to other parts of the world and could dampen oil demand there as well.

Along with the rebound in the economy has been an increase in commodities trading, particularly in oil futures. Oil is

traded on the New York Mercantile Exchange (NYMEX) and the price of oil, at least in the near term, is significantly influenced by thousands of trades conducted daily on the commodity. Some economists opine that the huge number of commodity trades on oil could be contributing to the volatility of oil prices seen in recent years. These opinions have generated suggestions that the commodities markets should be more tightly controlled and regulated. It has yet to be determined what impact, if any, commodities trading has on long-term oil pricing. The influx of money into commodities, however, has been linked to the decreasing value of the U.S. dollar. The U.S. dollar has dropped in value by over 7% this year and by 37% since 2001 due to years of low interest rates and recent federal stimulus spending. The weakened U.S. dollar has also been linked to the price of another commodity, gold, which recently soared to over \$1,100 per ounce. Further weakening of the dollar is often cited as contributing to higher oil prices.

Other drivers of oil prices cited less frequently include decisions made by OPEC and whether members adhere to the quotas the organization sets. OPEC successfully cut production in the fourth quarter of 2008, hoping to reverse the downward trend in oil prices. Although the cuts had some impact, they did not have an immediate response in oil prices, due in part to the over-supply of oil in the market. The organization cut production again in the spring of 2009, with the goal of increasing oil prices. Since June 2009, prices appear to have stabilized in the \$70 per barrel range. It is difficult to know how much influence OPEC's cuts have had on oil prices, but the organization does have the ability to control how much oil is in the market at any given time.

Disruptions in supply due to geopolitical events, weather-related events and

infrastructure constraints played less of a role in this year's oil price forecast. The hurricane season failed to produce any real threatening storms that could shut in production in the Gulf of Mexico or elsewhere. Geopolitical events such as those seen in Nigeria and Iran and other oil-producing regions are still occurring, but appear to be taking a back seat to the economy's impact on oil prices. Recently, there have been no overwhelming infrastructure concerns, at least in the oil markets, to drive prices up or down.

Demand and Supply Projections

in the long run, oil prices are ultimately a function of two factors: the supply of oil and the demand for oil. While oil price forecasting necessarily considers the impact of such factors as financial speculation and weather events, the underlying fundamentals of supply and demand must also be examined.

In their November 2009 update, the EIA predicted that world oil demand will rebound in 2010 by over one million barrels per day, with most of the increase coming from developing countries. Economic growth in China and other Asian nations is expected to lead the rebound in oil consumption. The developed world, as represented by the nations in the Organization for Economic Cooperation and Development (OECD), is expected have essentially no change in consumption from 2009 to 2010. However, the U.S. is expected to reverse its downward trend in oil consumption that began in 2005.

On the supply side, OPEC production, which was 2.4 million barrels per day lower than 2008 over the first nine months of 2009, will gradually increase in 2010 as oil demand increases, according to the EIA. OPEC spare capacity is expected to remain above four million barrels per day, which represents significantly more excess capacity than the historical average. Most of this spare

capacity is located in Saudi Arabia. In contrast to OPEC, non-OPEC oil production was actually 500,000 barrels per day higher than 2008 over the first nine months of 2009, with most of the increase coming from Russia. Non-OPEC supply is expected to show an additional increase in 2010 of 250,000 barrels per day.

Although oil supply and demand are currently showing signs of stabilization, we know that oil prices will continue to move in cycles in the future as they have in the past. The EIA cited renewed economic growth as the driver of increased oil demand which in turn has helped prices to stabilize. Likewise, participants in the department's price forecasting session identified the state of the U.S. and world economy as the most important factor in determining oil prices. With OPEC showing a historically high level of quota discipline and holding enough spare capacity to help smooth out any supply disruptions, oil demand now appears to be the most important fundamental driver of oil prices. Demand, as we know, is a function of the economy: as the world economy goes, so too will oil prices. Our oil price forecast assumes that the world economy will be well on the way to recovery by late 2010.

Forecast for West Texas Intermediate and Alaska North Slope Crude Oil

We forecast the price for West Texas Intermediate (WTI) crude oil to average \$68.71 for FY 2010, \$78.85 for FY 2011, and \$86.43 for FY 2012. Corresponding ANS prices are \$66.93, \$76.35, and \$83.93 for the three years. We forecast a WTI-ANS differential of \$2.50 per barrel, except in the case of FY 2010, which has some actual monthly differentials incorporated into the price. Beyond FY 2012, we project

that oil prices will stay flat in real terms and increase in nominal terms by the projected 2.75% based on advice from Callan Associates on capital market inflation.

2. Lease Expenditures

The passage of PPT and now ACES requires the Department of Revenue to forecast lease expenditures, in addition to oil prices and production. Lease expenditures are defined in part as the upstream costs that are the direct costs of exploring for, developing, or producing oil or gas deposits. The production tax under PPT and now ACES allows the deduction of lease expenditures to arrive at a taxable base. The production tax system also allows a partial credit against the tax liability for certain lease expenditures known as qualified capital expenditures. For more information on how ACES production tax is calculated, see Figure 4-4.

Methodology

The Department of Revenue has received three annual filings of tax returns under a net profits production tax, under PPT in 2006, and under ACES in 2007 and 2008. Additionally, the department receives monthly information filings from oil and gas companies operating in the state that provide estimated monthly lease expenditures by property. Semi-annually, the department receives projections of lease expenditures by property for up to five years into the future. These reports have greatly enhanced the department's ability to prepare better revenue forecasts.

The department also uses several other means to forecast lease expenditures, including consulting other taxpayer-submitted information, such as plans of development, federal partnership returns,

and other documentation. Production profiles are reviewed, as well as publicly available information on estimated costs to bring new fields online and projected start-up dates.

Forecast

In FY 2009, the following unaudited lease expenditures were reported on monthly information forms by companies producing or exploring for oil and/or gas on the North Slope: \$2.1 billion in operating expenditures⁽⁴⁾ and \$2.2 billion in capital expenditures. For FY 2010, we forecast operating expenditures at \$2 billion and capital expenditures at \$2.5 billion. For FY 2011, we forecast operating expenditures at \$2.1 billion and capital expenditures at \$2.9 billion. The lower forecast for operating expenditures reflects lower costs of operation associated with lower oil prices, as well as efficiencies gained in companies streamlining their operations. Higher capital expenditure forecasts reflect continuing development in newer fields like Oooguruk, Nikaitchuq, and Point Thomson as well as projects aimed at enhanced oil recovery and the development of heavy oil.

3. Transportation Charges and Other Production Costs

Taxpayers subtract marine transportation costs, the Trans Alaska Pipeline System (TAPS) tariff, feeder pipeline tariffs and an adjustment for quality bank charges from the appropriate destination value. This netback calculation is shown in Figure 4-8 for FY 2009-2019.

Marine Transportation Costs

Crude oil delivered to Valdez through TAPS is shipped by tanker to refineries in Washington, California, Hawaii and the Kenai Peninsula. Most North Slope

⁽⁴⁾ Includes the standard deduction for Prudhoe Bay and Kuparuk units per AS 43.55.165(j).

Figure 4-7. Basic Data Used for ANS Oil & Gas Production Taxes

	History FY 2009	Forecast FY 2010	Forecast FY 2011
State Production Tax Revenue from the North Slope			
Millions of Dollars	3,112.0	2,126.1	2,430.9
Key North Slope Assumptions			
Price of ANS WC in dollars per barrel	68.34	66.93	76.35
Transit Costs & Other in dollars per barrel	6.48	5.90	6.61
ANS Wellhead in dollars per barrel	61.86	61.03	69.74
Production in barrels per day	692,127	658,762	622,879
Royalty and federal barrels per day	93,664	85,564	80,255
Taxable barrels per day	598,463	573,198	542,624
Lease Expenditures in Millions of Dollars			
Operating Expenditures (Opex)	2,085	1,996	2,100
Capital Expenditures (Capex)	2,212	2,505	2,923
Total Expenditures	4,297	4,501	5,023
Implied North Slope Data			
Credits Used against Tax Liability in \$millions	350.0	350.0	400.0
Credits for Potential Purchase in \$millions	200.0	250.0	200.0
Lease Expenditures per barrel of oil produced			
Opex	8.3	8.3	9.2
Capex	8.8	10.4	12.9
Total Expenditures	17.0	18.7	22.1
Average Production Value per Barrel (Pre-Tax)	44.9	42.3	47.6
Production Tax Collected per Taxable Barrel	14.2	10.2	12.3

Notes

- 1 This table presents a grossly simplified snapshot of the production tax calculation on an average North Slope basis, and any use of this data should be viewed accordingly. Additionally, because production tax is calculated on a company basis, any simplification such as this distorts the actual value to companies. For example, a company's pre-tax production value per barrel could be significantly more or less than that shown in this table, depending on the "mix" of petroleum investments they have on the North Slope.
- 2 Lease expenditures for FY 2009 were prepared using unaudited company reported expenditure estimates.
- 3 Expenditure data for FY 2010 and FY 2011 are compiled from company submitted expenditure forecast estimates and other documentation as provided to the DOR.
- 4 CAPEX credits are spread out over two years as specified in the ACES production tax. In addition, the assumptions for the transitional credits and the \$12 million credits for small Alaska producers are not included in the table.
- 5 Operating expenditures for Prudhoe Bay and Kuparuk units include the standard deduction provision per AS 43.55.165(j).

crude is delivered to Puget Sound, San Francisco and Los Angeles to meet the demand of Washington and California refineries. These voyages take about two weeks depending on loading and unloading time and potential delays.

The majority of crude oil delivered is by BP's "Alaska Class" and ConocoPhillips' "Endeavour Class" tankers, all of which are state-of-the-art double-hulled tankers. Double-hulled tankers have an inner hull containing the tanker's crude oil and a surrounding outer hull to offer additional protection against oil pollution. These tankers range from about 140 to 195 deadweight tons and can carry over a million barrels at full capacity.

Allowable costs for oil transported by a vessel not owned or effectively owned by the producer of the transported oil are the total costs under the charter or contract and other allowable costs borne by the producer.

For crude oil shipped on tankers that are owned or effectively not owned by the producer of the transported oil, which is typically the case, the bulk of allowable costs are the following:

- depreciation,
- return on investment,
- fuel for the vessel while in port and at sea,
- wages and benefits for the crew and captain,
- routine maintenance,
- tug and pilotage fees and
- drydocking costs.

We forecast a modest increase in tanker transportation costs per barrel that is considered necessary in order to maintain the integrity of the fleet.

Trans Alaska Pipeline System (TAPS) Tariff

The tariff model for TAPS is developed from the Federal Energy Regulatory Commission (FERC) Opinion 502 compliance filings. Opinion 502 requires the carriers to establish a uniform rate using the Order 154-B methodology of trended original cost (TOC). Treatment of dismantlement, removal and restoration (DR&R) expense is specified and the return on equity component is consistent with FERC's new policy for oil pipelines.

The forecasting model simulates what the tariff would be with a TOC cost-of-service model using information from Opinion 502 and projections of capital additions and operating costs. The cost-of-service components and the methodology are modeled to emulate the regulatory approach and outcome. We do not attempt to predict the outcome of pending litigation or estimate the level and timing of protested rates. Corrections between filed, charged and allowed rates are made through the refund process and are not part of the tariff forecast.

In the summer of 2009 both BP Pipelines Alaska (BPPA) and ExxonMobil filed new \$4.01 interstate rates that were in effect subject to refund for short periods (BPPA July 1 to July 31st, and ExxonMobil May 1st to July 8th). The state protested those rates and therefore are subject to refund. ConocoPhillips also filed a \$4.01 rate but then withdrew it. ExxonMobil, ConocoPhillips and BPPA then each filed a \$4.10 rate, their current rates, that are subject to refund due to state protests. Unocal and Koch are still operating under their 2008 compliance rate tariffs.

A total revenue requirement (TRR) for operating and maintaining the pipeline while providing a reasonable rate of re-

turn for the investment in the pipeline. This TRR is then unitized by dividing by the total number of barrels of oil put through the pipeline.

To calculate the rate of return and depreciation components for the cost-of-service model, the beginning rate base is established and depreciated according to the FERC opinion, which extended the life of the line from 2011 to 2034. Carriers use 2034 as the end of the useful life of TAPS for setting depreciation rates, and FERC has rejected arguments to use a 2042 end-life for setting depreciation rates.

Additions to the rate base are made to account for future investments and capital expenditures for the Strategic Reconfiguration project.

Adjustments to the rate base use

- beginning rate base,
- trending,
- deferred return,
- new capital additions,
- depreciation,
- ending rate base.

The capital cost structure, cost of debt and real rate of return on equity are from the test period filing with FERC. Return on equity is consistent with the new FERC policy statement which allows Master Limited Partnerships to be included in rate of return proxy groups for determining rates for services. Property tax reflects the 2009 State Assessment Review Board (SARB) decision. Operating costs are function of the level of throughput and inflation. The deferred return and the Allowance for Funds Used During Construction (AFUDC) are amortized per the rate stipulated in the order. Other cost components are projected using relationships developed from historical data and statistical analysis.

Components of the total revenue requirement include

- operating expenses,
- property tax,
- depreciation expense,
- interest expense,
- return on equity,
- amortization of AFUDC,
- amortization of deferred return,
- income tax allowance,
- non-transportation revenues.

The TRR for the pipeline is the sum of the components listed above. A dollar per barrel tariff is calculated by dividing the TRR by deliveries. This makes the tariff sensitive to the inherent uncertainties of forecasting production as well as the uncertainties in forecasting the cost-of-service components.

TAPS is an old pipeline with about 75 percent of the TRR attributable to operating expenses. As the relatively fixed operating expenses are spread over fewer barrels, the tariff increases rapidly. From about \$5.60 per barrel in 2019 the tariff increases to over \$15.00 by the 2034 end-life for setting depreciation rates.

Feeder Pipeline Tariffs and Other Adjustments

These costs include feeder pipeline charges, other cost adjustments to account for the different qualities of oil entering the pipelines, and market-location differentials for intrastate sales.

Transportation costs for feeder pipelines are incurred to move the crude oils from the various North Slope production fields to Pump Station No. 1 of TAPS. There are six feeder pipelines on the North Slope.

The tariff forecast for each pipeline is based on a cost-of-service model tailored to match the particular settlement agreement of each feeder pipeline. The tariff, under a cost-of-service ratemaking approach, includes certain costs incurred by the pipeline owner and a return on the rate base. These costs may include operating expenses, DR&R allowance, depreciation and other costs. The return on the rate base is the product of the rate base and a rate of return. The rate base is the value of the carrier property minus depreciation and other adjustments. The rate of return is an equity-and-debt-weighted return agreed upon in the settlement agreement. To

forecast each pipeline's tariff per barrel, projected total costs and the return on the rate base are summed and divided over the projected total number of barrels throughput.

Wellhead Price

The combination of ANS wellhead value and production volumes forms the basis for both state production taxes and royalties. The wellhead value is calculated by subtracting the relevant marine transportation and pipeline tariff costs (as well as adjustments for North Slope feeder pipelines and pipeline quality bank) from the appropriate destination value. Figure 4-8 reflects this calculation for FY 2009-2019.

4. Crude Oil Production Methodology

In a hydrocarbon rich basin such as the North Slope of Alaska, any discussion regarding production forecasting methodology should begin with identifying those resources that are not included in our estimates. We do not include any estimates for undiscovered oil, including future potential from the Alaska National Wildlife Refuge (ANWR),

Figure 4-8. Fall 2009 Forecast Assumptions, FY 2009 and Forecasted FY 2010-2019 (nominal \$ per barrel)

Fiscal Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
ANS West Coast Price	68.34	66.93	76.35	83.93	86.24	88.61	91.05	93.55	96.13	98.77	101.49
ANS Marine Transportation	2.05	2.07	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45
TAPS Tariff	4.59	4.18	4.40	4.51	4.50	4.51	4.60	4.75	4.95	5.23	5.62
Other Deductions & Adjustments ⁽¹⁾	(0.15)	(0.35)	(0.46)	(0.45)	(0.42)	(0.36)	(0.37)	(0.38)	(0.39)	(0.40)	(0.41)
ANS Wellhead Price	61.86	61.03	70.36	77.78	80.02	82.27	84.57	86.89	89.22	91.54	93.84

⁽¹⁾ Includes other adjustments such as quality bank charges, location differentials and company-amended information.

the National Petroleum Reserve-Alaska (NPR-A), the federal Outer Continental Shelf (OCS) or onshore lands within the state of Alaska. We exclude from our estimates production from most of the known heavy or viscous oil deposits; in fact we consider none of the approximately 20 billion barrels from the giant Ugnu deposit. We exclude 96% of the viscous/heavy oil from the large West Sak field, projecting roughly 400 million barrels recovery out of roughly 10 billion barrels in place. We also exclude 87% of the heavy oil at Schrader Bluff, projecting roughly 285 million barrels recovery out of over 2 billion barrels in place. Additionally, none of the known oil discoveries in the federal OCS, in fields such as Siviluq, Kuvlum and Sandpiper, potentially totaling hundreds of millions of barrels of recoverable oil, are considered in the forecast. None of the known discoveries outside of the small NPR-A accumulations in the vicinity of the Alpine field are included. Finally, we limit any production attributed to a promising new enhanced oil recovery technology termed 'low salinity waterflood' to a portion of the Endicott field, where results from an ongoing pilot project are expected by year end. Laboratory tests using Endicott rock show low salinity waterflood can increase ultimate recovery by 10-15%, or approximately 150 million barrels. Successful slope-wide implementation of low salinity waterflood could result in incremental recovery measured in the billions of barrels. We also exclude any enhanced oil recovery from CO₂ injection, a long proven technology that complements low salinity waterflood and provides necessary disposition of an otherwise unwanted byproduct of gas conditioning associated with major gas sales from the North Slope. Carbon dioxide injection, presumed to occur only with major gas sales, could add hundreds of

millions barrels of incremental recovery from the North Slope.

We exclude the aforementioned resources, both known and unknown, in order to avoid speculation and to reduce the uncertainty typically associated with the commercialization, timing and magnitude of resource development. Accordingly, we believe that our current estimates of ultimate recovery from the North Slope are conservative.

For the production forecasting process, we engage a certified petroleum engineering consultant who performs a bottom-up evaluation on each of the individual fields that yields a forecast of three types of oil production: (1) oil that is currently being produced, (2) oil production that we expect to realize from projects currently under development and (3) oil production that we expect to realize from projects under evaluation. A detailed description of each type of production is provided later in this section. The engineering consultant employs decline curve analysis, augmented by generally accepted engineering principles, discussions with field operators and public and private information, in order to assemble our long range production forecast.

Assumptions

We continue to make adjustments to our production expectations from the North Slope in this fall 2009 forecast. As always, we examined reservoir performance, reviewed the uncertainty associated with the pace and scope of development of new fields and new projects within existing fields and re-evaluated planned and unplanned downtime for all fields. Our review indicates that, with minor exceptions, and notwithstanding planned and unplanned surface disruptions, all reservoirs are performing at or above expectations. From FY 2009 through FY 2050, we expect to produce almost

5.3 billion barrels of liquid hydrocarbons.

In the next ten years, we anticipate new developments on state and federal lands, both of which benefit the state. Most of the opportunities to add production from state lands are from expanded heavy/viscous oil development (West Sak, Orion, Polaris, Schrader Bluff fields), continued satellite development at Alpine (Fiord, Fiord-West, Nanuq, Qannik, Alpine West fields), and new developments at Oooguruk and Nikaitchuq. Production from the Oooguruk field began during the summer of 2008 and is progressing as expected. The Nikaitchuq field was sanctioned in early 2008 and development is underway, with first oil anticipated at year-end 2010. Although we forecast expanded development at West Sak, we have slowed the pace of heavy oil development there to allow the operator to fully evaluate technical and commercial issues associated with the development. For similar reasons, heavy oil development at Orion and Polaris has been slowed. For the Milne Point Unit, which includes both the Kuparuk pool and the heavier Schrader Bluff pool, we have slowed the pace of development to allow for reprioritized spending on infrastructure renewal projects. We have delayed the development of Point Thomson satellites one year in keeping with our 10-year development lead time, which may be conservative. The development of Point Thomson is based on the most recent Plan of Development submitted by the operator. Our review of Alpine satellite field development yielded expanded development at Alpine West, the addition of satellite Fiord West, increased expectations from Fiord and reduced expectations from Nanuq. New satellite Qannik came on production during the summer of 2008 and is under continued development.

Our forecast includes production from state lands as well as from federal lands. From a revenue standpoint, the State of Alaska benefits in at least five ways, albeit to a lesser degree, from new developments on federal lands: (1) shared royalties from federal OCS fields such as Liberty; (2) production taxes on federal oil produced onshore within Alaska (NPR-A); (3) increased property tax on any infrastructure on state lands required to produce and transport federal oil; (4) corporate income taxes; and (5) lower pipeline transportation tariffs, which increase wellhead prices. In addition, any oil processed through the Endicott facility (Liberty field) may increase net profits payments to the state. Federal oil produced within the State of Alaska can return up to 75% of the revenue generated by oil produced on state lands. Federal oil produced from non-state lands provides a revenue benefit limited to decreased transpor-

tation tariffs and increased property taxes.

For the fall forecast we have reevaluated the scope and pace of development of projects within the federal NPR-A to better reflect the timing of competing projects at Alpine and to account for further delineation drilling and subsequent evaluation this winter. The end result is a slight delay in development at known accumulations Spark and Moose's Tooth. Liberty development is underway, with long lead items such as building the world's largest land drilling rig setting the pace. The rate profile we use for Liberty is adapted from the plan of development filed with the Minerals Management Service and should be considered a base case scenario with upside potential.

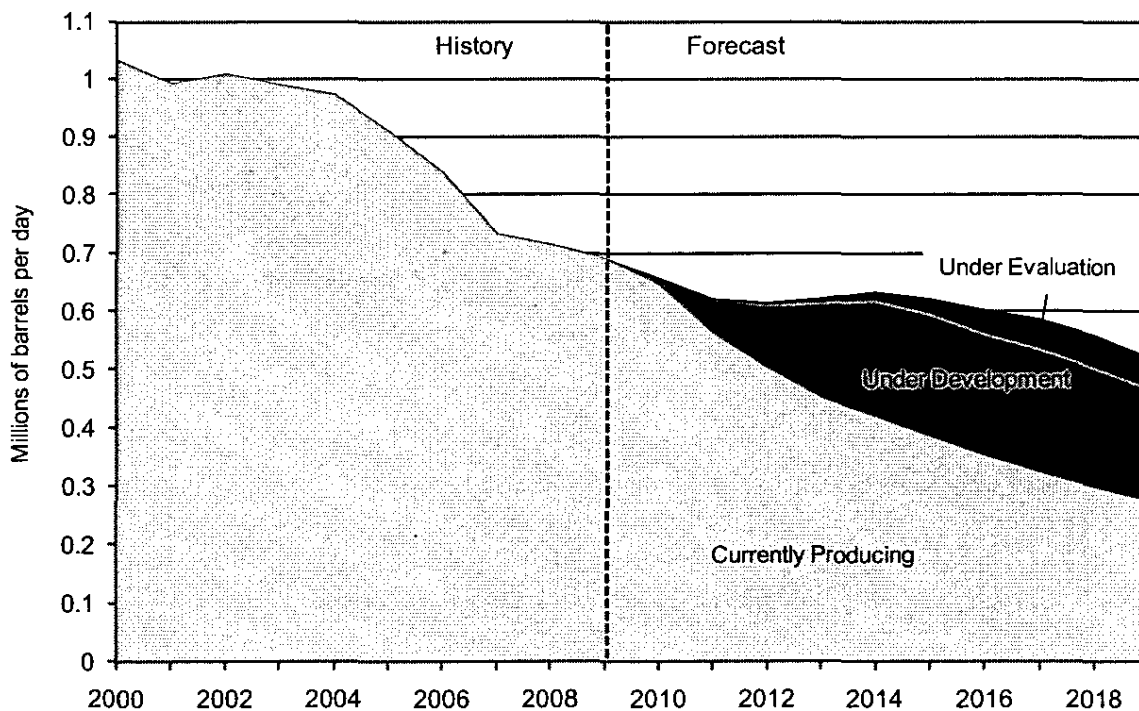
Although we anticipate new developments from state and federal lands over the next 10 years to contribute

to overall production and partially mitigate base decline, we continue to make near-term adjustments to reflect ongoing infrastructure renewal projects. Much of the new production we forecast relies upon the continued use of aging wells, flowlines, production facilities and pipelines, as does at least 500,000 barrels per day of existing production.

Crude Oil Production Forecast

Our three categories of North Slope production are illustrated in Figures 4-9 and 4-10. We do this so that the reader will have an understanding of the uncertainty associated with the production forecast. We forecast production of only those fields that have already been discovered and at a minimum are being evaluated for development.

Figure 4-9. Alaska North Slope Production, FY 2000-2009 and Forecasted FY 2010-2019



Currently Producing

Production characterized as “currently producing” includes baseline production and presumes a continued level of expenditure sufficient to promote safe, environmentally sound operations. Such expenditures include the following: well diagnostic and remedial work, data acquisition and rate-enhancing expenditures such as perforating, acid stimulation, well workovers, fracture treatments, artificial lift optimization and production profile optimization. This category of production also presumes continued gas and water injection for pressure support. Based on historical forecasting performance, we assign a 98% confidence level for the current fiscal year and a 95% confidence level for the second fiscal year forward.

Currently Under Development

Production characterized as “currently under development” is based on new projects either currently funded or awaiting project sanctioning in the very near future. It includes projects that may be in the design/construction phase, as well as development drilling and enhanced oil recovery (miscible or immiscible injection) projects, currently funded or underway, but not included in the “currently producing” category. It also includes incremental oil expected from the long-term gas cap water injection project at Prudhoe Bay and Endicott which is planned for 2012. Examples of production currently under development include the Fiord, Nanuq, Alpine West, Fiord West and Qannik satellites at Alpine, the Borealis, Orion and Polaris satellites at Prudhoe Bay, development drilling at Tarn, Liberty, Oooguruk, and Nikaitchuq.

The timing of these projects are often influenced by budget cycles, working interest owner approval, available human resources, equipment procurement, and rig availability. Our subjective confidence for this category of production is 85% to 90%.

Currently Under Evaluation

Production characterized as “currently under evaluation” includes technically viable projects currently in the “pencil sharpening” stage where engineering, cost, risk and reward are all being actively evaluated. These projects are all currently unfunded by the operators but have a high chance of being brought to fruition. Examples include heavy oil development outside of the core or near core area at West Sak, longer term Orion drilling, half of all new Schrader Bluff drilling, long-term production from Point Thomson and associated satellites, and pools within the NPR-A.

Figure 4-10. Alaska North Slope Production, FY 2009 and Forecasted FY 2010-2019⁽¹⁾
(million barrels per day)

Fiscal Year	Currently Producing	Under Development	Under Evaluation	Total ANS
2009	0.692	0.000	0.000	0.692
2010	0.646	0.012	0.000	0.659
2011	0.562	0.060	0.000	0.623
2012	0.504	0.109	0.003	0.617
2013	0.452	0.165	0.007	0.624
2014	0.420	0.201	0.014	0.635
2015	0.385	0.213	0.025	0.623
2016	0.353	0.211	0.041	0.604
2017	0.324	0.214	0.051	0.588
2018	0.298	0.207	0.055	0.561
2019	0.276	0.196	0.052	0.524

⁽¹⁾ Some of the oil forecasted in the Under Development and Under Evaluation categories are from new projects in fields currently producing.

Confidence levels vary for this category of production. Production from the known NPR-A fields that are undergoing further delineation and likely will use the existing Alpine facility might have confidence levels approaching that of “production under development.” High cost, scope challenged developments such as Point Thomson probably deserve lower confidence, not because of the lack of reserves, but because of the uncertainty in the timing of first production.

As Figure 4-11 shows, by FY 2014 more than one-third of our projected oil production will come from projects requiring significant new investment.

Undiscovered Potential

The long-term revenue outlook published in this book is associated with our forecast of production from oilfields that have already been discovered. However, it is important to discuss the potential for future production from resources currently undiscovered.

In April 2009, the U.S. Department of Energy released an addendum to their 2007 report entitled *Alaska North Slope Oil and Gas: A Promising Future or an Area in Decline?*⁽⁵⁾ which assesses the potential for Alaska to remain a major producer of oil and gas under different development scenarios. The report summarizes near-term potential (2005-2015) and long-term potential (2015-2050) mostly under a major natural gas sales scenario. According to the report, the North Slope is a relatively young petroleum province from an exploration perspective, and may provide oil, and increasingly more important natural gas, for years to come.

The DOE report evaluates geologic and commercial viability of future oil and gas production from five areas or provinces: (1) the central Arctic area between the Colville and Canning Rivers (and adjacent state waters); (2) the 1002 area of ANWR; (3) NPR-A; (4) the Beaufort Sea OCS and (5) the Chukchi Sea OCS. Under the most optimistic sce-

nario, DOE reported mean technically recoverable oil resources of 47.8 billion barrels and mean technically recoverable gas resources of 194.9 trillion cubic feet (TCF) from these five areas. Figure 4-12 shows the breakout by exploration area.

These figures represent the amount of hydrocarbon resources that are technically recoverable with today’s technology assuming that all five areas are open to development; however, they say nothing about the economic recoverability. DOE also estimates economically recoverable reserves from these five areas using a range of oil and gas prices (\$25 to \$60 per barrel and \$3.13 to \$7.50 per thousand cubic feet of gas), and an 8:1 oil-to-gas price ratio. Using the high oil price case of \$60 per barrel, total economically recoverable oil for the 2005-2050 time period is estimated at 31 billion barrels of oil and 135 TCF of gas. Figure 4-13 details the economic recoverable resources by area.

Figure 4-11. New Oil as a Percentage of Total Oil (million barrels per day)

Fiscal Year	Total New Oil	ANS Total	Percent New Oil
2010	0.012	0.659	1.9%
2011	0.061	0.623	9.7%
2012	0.113	0.617	18.3%
2013	0.172	0.624	27.6%
2014	0.215	0.635	33.9%
2015	0.238	0.623	38.2%
2016	0.252	0.604	41.6%
2017	0.265	0.588	45.0%
2018	0.262	0.561	46.8%
2019	0.248	0.524	47.3%

⁽⁵⁾ http://www.netl.doe.gov/publications/press/2008/08002-DOE_Releases_Alaska_Report.html; http://www.netl.doe.gov/technologies/oil-gas/publications/AEO/ANS_potential.pdf

Petroleum Property Tax Production Property

An annual tax is levied each year on the full and true value of property taxable under AS 43.56. The tax on oil and gas property is the only statewide property tax. The valuation procedure for three distinct classes of property—exploration, production and pipeline transportation—is described here.

Exploration Property

Value is based on the estimated price that the property would bring in an open market under prevailing market conditions in a sale between a willing seller and a willing buyer, both conversant with the property and with prevailing general price levels.

The state petroleum property assessor gathers raw data for determining market value by reviewing the details of equipment sales in Alaska when available and reviewing trade journals. This data is then applied to the taxable property, taking into account age, capacity and physical and functional obsolescence.

Value is determined on the basis of replacement cost new less depreciation, based on the economic life of the proven reserves.

The factor used in the depreciation calculation for the facility typically equals the years of remaining life divided by the total life.

Pipeline Transportation Property

The full and true value of taxable pipeline property is determined with due regard to the economic value of the property based on the estimated life of the proven reserves of gas or unrefined oil that will be transported by the pipeline. We rely upon several standard appraisal techniques to value Alaska pipelines. When market rents are available, we analyze the income method under which the value is the net present worth of all future income streams of the pipeline. We primarily rely on replacement cost new less depreciation, based on the economic life

of the reserves that feed the pipeline. This is especially useful when rents are constrained by the regulatory process or when market rents cannot be obtained for use in the income method.

Figure 4-14 illustrates the property tax distribution between local communities and the state for FY 2009. The property value is assessed by the state. A local tax is levied on the state's assessed value for oil and gas property within a city or borough, and is subject to the local property tax limitations established in AS 29.45.080 and AS 29.45.100. The state's mill rate is effectively 20 mills minus the local rate.

Petroleum Corporate Income Tax

Alaska levies two types of corporate income tax. This section focuses on the oil and gas corporate income tax. Forecasts and discussion of the corporate income tax as applied to corporations other than oil and gas corporations can be found in the Other Revenue section of this forecast.

Figure 4-12. Technically Recoverable North Slope Oil and Gas Potential

Exploration Area	Mean Technically Recoverable Oil (BBO)	Mean Technically Recoverable Gas (TCF)
ANWR 1002 Area	10.3	3.8
Beaufort Sea OCS	6.9	32.1
Chukchi Sea OCS	15.5	60.1
Colville-Canning Area (& adjacent state waters)	4.5	37.5
NPR-A	10.6	61.4
TOTAL	47.8	194.9

Source: U.S. Department of Energy, August 2007; Addendum April 2009.

Figure 4-13. Economically Recoverable North Slope Oil and Gas Potential

Exploration Area	Near Term 2005-2015		Long Term 2015-2050		Total 2005-2050	
	Oil (BBO)	Gas (TCF)	Oil (BBO)	Gas (TCF)	Oil (BBO)	Gas (TCF)
ANWR 1002 Area	N.A.	N.A.	6.75	2.0+	6.75	2.0+
Beaufort Sea OCS	0.65	1.0	4.3	20.0	4.95	21.0
Chukchi Sea OCS	NA	NA	9.5	50.0	9.5	50.0
Colville-Canning Area (& adjacent state waters)	1.1	10.0	2.05	23.3	3.15	33.3
NPR-A	1.1	1.0 (associated gas)	5.4	30.0	6.5	31.0
TOTAL ARCTIC ALASKA	2.85	12.0	28.0	125.3	30.85	137.3

Source: U.S. Department of Energy, August 2007; addendum April 2009.

Figure 4-14. Distribution of Petroleum Property Tax, FY 2009 (\$ million)⁽¹⁾

Municipalities	Gross Tax	Local Share	State Share
North Slope	292.8	270.8	22.0
Unorganized	76.3	0.0	76.3
Valdez	39.6	39.6	0.0
Kenai	14.1	7.0	7.1
Fairbanks	13.9	9.3	4.6
Anchorage	4.7	3.7	1.1
Other Municipalities ⁽²⁾	0.4	0.2	0.2
Total	441.6	330.5	111.2

⁽¹⁾ Amounts shown here do not include the supplemental property tax roll and as a result may not exactly match data presented elsewhere in this forecast.

⁽²⁾ Includes Matanuska-Susitna Borough, Cordova and Whittier.

An oil and gas corporation's Alaska income tax liability depends on the relative size of its Alaska and worldwide activities and the corporation's total worldwide net earnings. The corporation's Alaska taxable income is derived by apportioning its worldwide taxable income to Alaska based on the average of three factors as they pertain to the corporation's Alaska operations: (1) tariffs and sales, (2) oil and gas production and (3) oil and gas property.

Historically, oil and gas corporate income tax revenue has varied greatly along with oil prices and oil industry profits. In FY 1982, revenue from this tax was \$668.9 million. As recent as FY 1994, the oil and gas corporate income tax generated a mere \$17.8 million. For the past several years, revenues from the oil and gas corporate income tax have benefited from high oil prices and oil industry profits, generating \$492.2 million in FY 2009. This represents a decrease from the \$605.8 million collected in FY 2008.

Our forecast of oil and gas corporate income tax collections uses an economic model based on the statistical

relationships between historical tax payments, crude oil prices, North Slope oil production and refinery margins. We then adjust for refunds and carry-forwards which cause actual collections to differ from estimated payments.

We forecast oil and gas corporate income tax collections of \$470 million in FY 2010. We expect moderate increases in nominal oil prices to result in corresponding increases in oil and gas corporate income tax revenue.

Restricted Oil Revenue

According to Article IX, Section 15 of the Alaska Constitution, a minimum of 25% of all mineral lease rentals, royalties, royalty sale proceeds, federal mineral revenue sharing payments and bonuses received by the state must be deposited into the Alaska Permanent Fund. With the repeal of HB 11⁽¹⁾ approximately 30% of oil and gas royalties goes into the principal of the Alaska Permanent Fund and 0.5% goes into the Public School Trust Fund.

In addition, AS 37.14.110 requires a contribution of 0.5% of all royalties and bonuses to the Public School Trust

Fund. Settlements with, or judgments against, the oil industry involving tax and royalty disputes must be deposited in the Constitutional Budget Reserve Fund (CBRF).

The state is entitled to 50% of all bonuses, rents and royalties from oil development activity in the federal NPR-A, all of which flows into the NPR-A Special Revenue Fund. Revenue in the fund is available for appropriation in the form of grants to municipalities that demonstrate present or future impact from NPR-A oil development. Of the revenue not appropriated to the municipalities, 25% goes to the Permanent Fund, 0.5% goes to the Public School Trust Fund, and the rest may be appropriated to the Power Cost Equalization and Rural Electric Capitalization Fund. Any remaining revenue after these appropriations lapses into the General Fund.

Figure 4-15 reflects restricted oil and gas revenue.

Figure 4-15. Restricted Oil Revenue, FY 2009 and Forecasted FY 2010-2011 (\$ million)

Restricted	History	Forecast	
	FY 2009	FY 2010.	FY 2011
Royalties to Permanent Fund & School Fund			
Royalties, Bonuses & Rents to the Permanent Fund	659.8	601.3	672.3
Royalties, Bonuses & Rents to the School Fund	11.0	10.4	11.1
Subtotal	670.8	611.7	683.4
Settlements to CBRF			
Settlements to CBRF	202.6	440.7	20.0
NPRA Royalties, Rents & Bonuses			
NPRA Royalties, Rents & Bonuses	14.8	4.9	4.9
Total Restricted	888.2	1,057.3	708.3



Revenue Sources Book

Alaska Department of Revenue – Tax Division

FALL 2009

5. Other Revenue (except Federal & Investment)

Figure 5-1. FY 2009 Other Revenue: \$0.9 billion

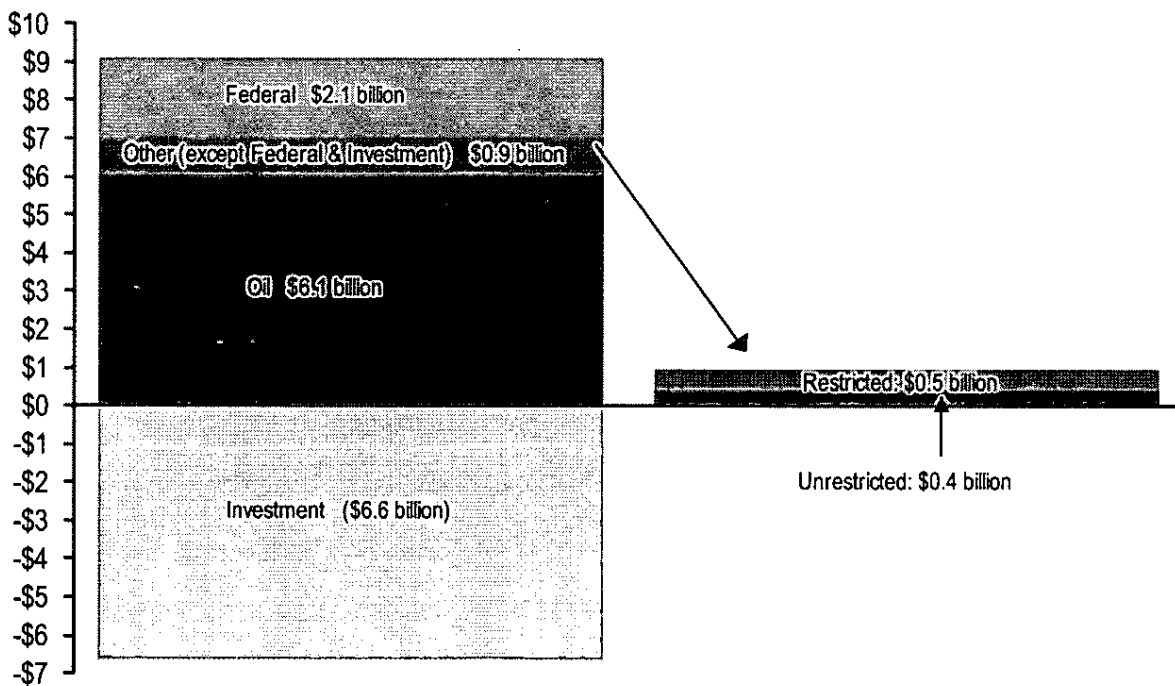


Figure 5-2. Total Other Revenue (except Federal & Investment), FY 2009 and Forecasted FY 2010-2011 (\$ million)

Unrestricted	History	Forecast	
	FY 2009	FY 2010	FY 2011
Taxes	294.7	284.4	298.8
Charges for Services	19.3	20.0	23.2
Fines & Forfeitures	10.5	8.9	8.9
Licenses & Permits	35.5	40.5	38.8
Rents & Royalties	15.6	13.6	14.2
Other	27.0	21.9	21.9
Total Unrestricted	402.6	389.3	405.8
Restricted			
Taxes	155.4	138.9	138.7
Charges for Services	250.9	257.2	258.4
Fines & Forfeitures	39.1	36.1	34.9
Licenses & Permits	34.7	39.2	39.5
Rents & Royalties	7.4	9.0	9.6
Other	58.3	108.5	108.5
Total Restricted	545.8	588.9	589.6
Total Other Revenue	948.4	978.2	995.4

General Discussion

This section includes income from sources other than oil, state investments and federal receipts including non-oil taxes, charges for services, fines and forfeitures, licenses and permits, rents and royalties and other revenue sources. These revenue sources are divided between unrestricted and restricted revenues; the amounts of each are reflected in Figures 5-2 through 5-8 throughout this chapter. Restricted revenue includes money deposited in funds other than the General Fund, as well as receipts that are restricted by statute or that the

legislature customarily appropriates for a particular purpose or program, such as sharing of fish tax revenue with municipalities.

Taxes

Alcoholic Beverages Tax

Alcoholic beverage taxes are collected primarily from wholesalers and distributors of alcoholic beverages sold in Alaska. The per-gallon tax rates on alcoholic beverages are \$1.07 for beer, \$2.50 for wine and \$12.80 for liquor. The tax

on beer produced by qualifying small brewers is \$0.35 per gallon. Revenue is deposited into the General Fund. Fifty percent of the revenue is deposited into a subfund of the General Fund, the Alcohol and Other Drug Abuse Treatment and Prevention Fund, and is treated as restricted in this forecast.

Over the past 10 years, alcohol consumption has grown at an average annual rate of 0.6% for beer, 4.2% for wine, and 3.3% for liquor. We forecast that consumption will continue to grow at these historical average rates.

Charitable Gaming

Under Alaska law, municipalities and qualified nonprofit organizations may conduct certain charitable gaming activities. The purpose of these activities is to derive public benefit in the form of money for the charities and revenues for the state. The Department of Revenue collects permit and license fees, a 1% net proceeds fee and a 3% pull-tab tax. We forecast that revenues from charitable gaming activity will decrease slightly in FY 2010 and remain flat in FY 2011.

Commercial Passenger Vessel Taxes

In August 2006, Alaska voters approved an initiative that imposed new taxes and fees associated with commercial passenger vessels:

- The Cruise Ship Passenger Fee is a tax of \$46 on each passenger traveling on a commercial passenger vessel with 250 or more berths. Revenues are deposited into a subfund of the General Fund, the Commercial Vessel Passenger Tax Account. Five dollars of the tax is distributed to each of the first five ports of call, and an additional 25% of the tax is designated for other local governments impacted by the cruise ship industry via the Regional Cruise Ship Impact Fund. The entire passenger fee is considered restricted for purposes of this forecast. Based on company announcements, we forecast passenger counts, and therefore tax collections, to decline for both FY 2010 and FY 2011. There may be some growth in FY 2012.
- The Ocean Ranger Fee is an additional per-berth fee of \$4 to operate the Ocean Ranger program, which provides for independent observers of engineering, sanitation and health practices. This fee is considered restricted and is included in the Charges for Services section of this forecast.

- The Large Passenger Vessel Gambling Tax is a tax of 33% on the adjusted gross income from gaming or gambling activities aboard large passenger vessels in the state. Revenue goes into a subfund the General Fund and is considered restricted for purposes of this forecast. We expect revenue to decline to \$5.7 million in FY 2010 from \$6.3 million in FY 2009.
- The Alaska corporate income tax now applies to large commercial passenger vessels. The effects of this provision are included in our forecast of corporate income taxes.
- There are new penalties for false reporting, violating environmental regulations and failing to make proper disclosures on promotions and shore side activity sales. Any revenue from these provisions is included in the Fines and Forfeitures section of this forecast.

Corporate Income Tax

Alaska levies two types of corporate income tax: one that applies to oil and gas corporations and one that applies to corporations other than oil and gas corporations. Forecasts and discussion of the corporate income tax as applied to oil and gas corporations can be found in the Oil Revenue section of this forecast.

Alaska levies the corporate income tax on net income of corporations that do business in the state and derive income from sources within Alaska. Corporate tax rates are graduated from 1% to 9.4% in \$10,000 increments of Alaska taxable income; the maximum rate of 9.4% applies to taxable income over \$90,000. S-Corporations and LLCs that file federally as partnerships are generally exempt from corporate income tax. Corporations compute their tax liability based on federal taxable income with Alaska adjustments. Corporations other than oil and gas corporations apportion their

income to Alaska by using a three-factor apportionment based on sales, property and payroll. Alaska taxable income is determined by applying the apportionment factor to the corporation's modified federal taxable income.

We produce our forecast of non-petroleum corporate income tax collections by using two economic models: one for the largest sector in terms of collections (mining) and one for all other sectors.

The mining sector model is based on the statistical relationship between historical tax payments, corporate profits and zinc prices. Zinc prices are used because zinc accounts for over half of Alaska minerals production. The model for all sectors other than mining is based on the statistical relationship between historical tax payments, corporate profits and crude oil prices. Crude oil prices are used because the price of oil influences company profitability in many economic sectors in Alaska. After forecasting estimated payments, we then adjust for refunds, carry-forwards and other payments that cause actual collections to differ from estimated payments.

Over the past few years, income tax revenue from corporations other than oil and gas corporations has been above the historical average. In FY 2009, revenue was \$120.9 million, the fourth consecutive year of collection over \$100 million. Looking forward, collections will be lower because of the economic downturn as well as lower prices for Alaska's oil and minerals. The first half of FY 2010 appears weak and collections are expected to total \$86.6 million for the year. In FY 2011 we expect that collections will be \$89 million – about \$32 million less than FY 2009.

Electric Cooperative and Telephone Cooperative Taxes

The electric cooperative tax is based on kilowatt hours furnished by qualified electric cooperatives recognized under Title 10 of the Alaska Statutes. The telephone cooperative tax is levied on gross revenue of qualified telephone cooperatives under Title 10. Revenue from cooperatives located in municipalities is treated as restricted revenue in this forecast because it is shared 100% with the municipalities. The small amount of revenue collected from cooperatives outside municipalities is retained by the state. We forecast that revenues from the electric and telephone cooperative taxes will grow according to the overall rate of inflation.

Estate Tax

The estate tax is levied on the transfer of an estate upon death. The Alaska estate tax is tied to the federal tax, with the amount of the state tax equaling the maximum state credit allowed on the estate's federal return. All revenue derived from estate taxes is deposited in the General Fund.

As a result of changes to the federal estate tax, the Alaska estate tax was phased out completely beginning January 1, 2005. The federal estate tax changes that caused the state tax to phase out are currently scheduled to sunset after December 31, 2010. Assuming the tax changes sunset as scheduled, Alaska will begin to receive revenue from the estate tax again in FY 2012.

Fisheries Business Tax

The fisheries business tax is levied on businesses that process fisheries resources in or export fisheries resources from Alaska. Although the tax usually is levied on the act of processing, the tax is often referred to as a "raw fish tax" because it is based on the value of the raw fishery

resource. Tax rates vary from 1% to 5%, depending on whether a fishery resource is classified as "established" or "developing," and whether it was processed by a shore-based or floating processor. Revenue from the tax is deposited in the General Fund. Fifty percent of the revenue (before credits) is shared to qualified municipalities and is treated as restricted in this forecast.

We forecast fisheries business tax revenues based on estimated taxable values of the major fisheries in the state and historical effective tax rates. Fisheries business tax revenue retained by the state is reduced by a forecast of tax credits, including Salmon Product Development credits, which apply only to the state portion of the tax.

Fishery Resource Landing Tax

The fishery resource landing tax is levied on fishery resources processed outside of and first landed in Alaska, and is based on the unprocessed statewide average price of the resource. The tax is collected primarily from factory trawlers and floating processors that process fishery resources outside the state's 3-mile limit and bring their products into Alaska for shipment. The tax rates vary from 1% to 3%, based on whether the resource is classified as "established" or "developing." All revenue derived from the tax is deposited in the General Fund. Fifty percent of the revenue (before credits) is shared to qualified municipalities, and is treated as restricted in this forecast.

We forecast fisheries resource landing tax revenues based on estimated taxable values of the major fisheries in the state and historical effective tax rates. Fisheries resource landing tax revenue retained by the state is reduced by a forecast of tax credits which apply only to the state's share of the tax.

Insurance Premium Tax

Insurance companies in Alaska pay an insurance premium tax instead of corporate income tax, sales or other excise taxes. Revenue is deposited into the General Fund, and for most types of insurance, the tax is treated as unrestricted revenue. Insurance premium taxes on worker's compensation insurance are deposited into a subfund of the General Fund, the Workers Safety and Compensation Fund, and are reflected as restricted in this forecast. The restricted component also includes service fees paid into the Workers Safety and Compensation Fund by employers who are uninsured or self-insured.

We forecast insurance premium tax revenues based on estimates provided by the Department of Commerce, Community and Economic Development's Division of Insurance, which administers the insurance premium tax, and the Department of Labor and Workforce Development's Workers Compensation Division, which collects worker's compensation service fees.

Mining License Tax

The mining license tax is a tax ranging from 0% to 7% on the net income of all mining operations in the state. Except for sand and gravel operations, new mining operations are exempt from the mining license tax for a period of 3½ years after production begins.

Our forecast is produced using a bottom-up approach that estimates tax payments for each of the major mines in the state based on expected minerals prices and production.

Mining license tax revenues were \$15.5 million in FY 2009, a dramatic decrease from \$54.4 million in FY 2008. However, prices for many minerals have climbed recently. In particular, zinc prices have stabilized and are likely to increase as the global demand returns.

(Zinc prices are particularly important because zinc accounts for more than half of Alaska's non-petroleum mineral production).

Based on expectations of higher profits at Alaska's mines, we forecast mining license tax revenues will increase from what was collected in FY 2009. We foresee an increase to over \$29 million in FY 2010 followed by collections of more than \$28 million by FY 2011.

Motor Fuel Tax

The motor fuel tax is imposed on all motor fuel sold, transferred or used within Alaska. Per gallon rates are 8 cents for highway use, 5 cents for marine fuel, 4.7 cents for aviation gasoline, 3.2 cents for jet fuel, and 8 cents or 2 cents for gasohol, depending on the season, location and EPA mandate. Motor fuel taxes are collected primarily from wholesalers and distributors licensed as qualified dealers. Various uses of fuel are exempt from tax, including fuel used for heating or flights to or from a foreign country. Although the statutes state that the legislature may appropriate the revenue for specific purposes, including highway construction and maintenance and water and harbor facilities, all motor fuel tax receipts are paid into the general fund and are treated as unrestricted for purposes of this forecast. Sixty percent of the taxes attributed to aviation fuel sales at municipal airports are shared with the respective municipalities, and are treated as restricted for the purposes of this forecast.

A temporary suspension of the motor fuel tax took effect September 1, 2008 and ended August 31, 2009. Therefore, FY 2009 included only two months of motor fuel tax collections and FY 2010 will include ten months of collections.

We forecast motor fuel tax revenue based on Energy Information Agency projections for U.S. motor fuel con-

sumption growth, with adjustments for the temporary tax suspension.

Tire Fee

The tire fee has two components. The first component is a tax of \$2.50 on all new tires sold in Alaska for motor vehicles intended for highway use. The second component is an additional \$5 fee per tire on all new tires with heavy studs sold in Alaska, and a \$5 fee per tire on the installation of heavy studs on a previously un-studded tire.

We forecast tire fee revenue based on the expected number of vehicle registrations in the state.

Seafood Assessments and Taxes

The Department of Revenue administers five different programs that raise money through seafood assessments and taxes.

The rates for these assessments and taxes are determined by a vote of the appropriate association within the seafood industry, by members of the Alaska Seafood Marketing Institute, or by the Department of Revenue.

The five programs are the following:

- The seafood marketing assessment, which applies to all seafood products made or first landed in Alaska and all unprocessed products exported from Alaska.
- The dive fishery management assessment, which is levied on the value of fishery resources taken using dive gear in a designated management area.
- The regional seafood development tax, which is levied on the value of fishery resources in a designated management area.
- The salmon enhancement tax, which is levied on salmon sold or exported from designated aquaculture regions.

- The cost recovery fisheries assessment, a new program authorized in 2006. This program allows hatcheries to establish a common property fishery and recoup costs through an assessment on fishery resources taken in the terminal harvest area. So far, no hatcheries have elected to use this program as a funding source.

Although revenue received under these assessments is deposited in the General Fund, funds are treated as restricted revenue in this forecast because they are set aside for the legislature to appropriate for the benefit of the seafood industry, either in marketing or in management and development of the industry.

We forecast revenue for seafood assessments and taxes based on the estimated taxable value of the relevant seafood income.

Tobacco Tax

The tobacco tax is levied on cigarettes and tobacco products sold, imported or transferred into Alaska. Tobacco taxes are collected primarily from licensed wholesalers and distributors. There are two components to the tobacco tax: the cigarette tax and the other tobacco products tax.

The tax rate on cigarettes has been \$2.00 per pack since July 1, 2007. Of the cigarette tax, \$0.76 per pack is deposited into the School Fund, and is considered restricted revenue. All cigarette and tobacco products license fees are also deposited in the School Fund. The remainder of the cigarette tax revenue is deposited into the General Fund. Of the General Fund portion, 8.9% is deposited into a subfund of the General Fund, the Tobacco Use Education and Cessation Fund, and is treated as restricted in this forecast.

We forecast cigarette tax revenue based on projected average consumption declines of 4% annually.

The tax rate on other tobacco products, such as cigars and chewing tobacco, is 75% of the wholesale price and is deposited entirely in the General Fund.

We forecast that moderate increases in wholesale prices and consumption will result in other tobacco products tax revenue continuing to increase at the 10-

year average rate of over 7% annually.

Our forecast for both cigarettes and other tobacco products includes an adjustment for the demand response to increased federal excise taxes on tobacco that took effect April 1, 2009.

Vehicle Rental Tax

The vehicle rental tax is a 10% tax on most passenger vehicle rentals of 90 days or less, and a 3% tax on rentals of recreational vehicles for 90 days or less.

Figure 5-3. Other Taxes, FY 2009 and Forecasted FY 2010-2011 (\$ million)

Unrestricted	History	Forecast	
	FY 2009	FY 2010	FY 2011
Excise Tax			
Alcoholic Beverage	19.5	19.0	19.5
Tobacco Products – Cigarettes	36.4	32.9	31.6
Tobacco Products – Other	10.2	10.6	11.5
Electric & Telephone Cooperative	0.1	0.1	0.1
Insurance Premium	45.5	43.9	43.0
Motor Fuel Tax	10.1	30.0	40.3
Tire Fee	1.5	1.5	1.5
Vehicle Rental	8.0	8.1	8.4
Subtotal	131.3	146.1	155.9
Corporate Income Tax (non oil and gas)	120.9	86.6	89.1
Fish Tax			
Fisheries Business	19.3	15.1	16.4
Fishery Resource Landing	4.7	4.7	6.1
Subtotal	24.0	19.8	22.5
Other Tax			
Charitable Gaming	2.8	2.7	2.7
Estate	0.2	0.0	0.0
Mining License	15.5	29.2	28.6
Subtotal	18.5	31.9	31.3
Total Unrestricted Taxes	294.7	284.4	298.8

Figure 5-3. Continued

Restricted	History	Forecast	
	FY 2009	FY 2010	FY 2011
Excise Tax			
Alcoholic Beverage (alcohol & drug treatment)	19.0	19.0	19.5
Insurance Premium/Other (worker's safety & compensation) ⁽¹⁾	6.8	6.2	5.6
Electric & Telephone Cooperative (municipal share)	4.0	4.1	4.2
Tobacco – Cigarettes (school fund)	23.1	22.1	21.2
Tobacco – Cigarettes (tobacco use cessation)	3.4	3.2	3.1
Motor Fuel Tax – Aviation (municipal share)	0.1	0.1	0.1
Subtotal	56.4	54.7	53.7
Fish Tax			
Fisheries Business (municipal share)	22.9	17.6	18.9
Fishery Resource Landing (municipal share)	6.3	5.3	6.7
Salmon Enhancement (Aquaculture Association share)	5.8	5.5	5.1
Seafood Development (qualifying regional associations)	1.4	1.4	1.2
Seafood Marketing Assessment	8.9	7.1	8.0
Dive Fishery Management Assessment	0.4	0.4	0.4
Subtotal	45.7	37.3	40.3
Other Taxes & Fees			
Cruise Ship Passenger Fee (State Share)	24.9	21.9	20.9
Cruise Ship Passenger Fee (Municipal & Region Share)	9.9	9.0	8.5
Cruise ship Passenger Fee (regional cruise ship impact fund)	11.6	10.3	9.8
Large Passenger Vessel Gambling	6.3	5.7	5.5
Settlements to CBRF (non-petroleum)	0.6	0.0	0.0
Subtotal	53.3	46.9	44.7
Total Restricted Taxes	155.4	138.9	138.7
Grand Total	450.1	423.3	437.5

⁽¹⁾ In addition to the worker's compensation insurance premiums for the Insurance Premium Tax, this amount also includes services fees from employers who are self-insured.

The vehicle rental tax provisions became effective January 1, 2004.

We forecast that vehicle rental tax revenue will remain essentially flat in FY 2010 due to the economic downturn then increase with the overall rate of inflation.

Charges for Services

The charges for services category includes fees and other program charges for state services. Revenues reported in this category do not include all charges for state services—just those that do not fit into other categories in this report.

Most of these receipts are considered restricted revenue because they are returned to the program where they were generated. The only unrestricted revenues listed in this category come from charges that do not have program receipt designations, or are not otherwise segregated and appropriated back to a program. Many of the charges for services are small amounts that we have grouped into the broad categories “General Government,” “Natural Resources” and “Other.” Our forecast for these categories is based on fiscal year-to-date collections and historical averages. The largest categories of charges for services are listed separately and are discussed below.

Marine Highway Fund

The Alaska Marine Highway Fund is a subfund of the General Fund and receives revenue from state ferry system operations. The legislature has discretion over how the revenue is allocated. Because revenue is customarily appropriated for Alaska Marine Highway operations, they are considered restricted for this forecast. We forecast Marine Highway Fund receipts based on revenue expectations in the Alaska Marine Highway System business plan.

Commercial Passenger Vessel Fees

Commercial passenger vessel fees paid into the Environmental Compliance Fund come from two sources: ocean ranger fees and environmental compliance fees. All fees paid into the fund are considered restricted for purposes of this forecast. We forecast receipts based on passenger count estimates that are consistent with our Commercial Passenger Vessel tax forecast.

The Ocean Ranger Fee is a per-berth fee of \$4 that applies to commercial passenger vessels with 250 or more berths. The fee is levied to support the Ocean Ranger Program, which provides for independent observers of engineering, sanitation and health practices aboard the vessels. This fee was imposed as part of an initiative passed by voters in August 2006, and is covered in more detail in the Taxes section of this chapter.

Environmental compliance fees are levied on commercial passenger vessels with over 50 berths. Fees range from \$75 to \$3,750 per vessel based on the number of berths, and funds are used to support environmental compliance programs.

Program Receipts

Under AS 37.05.142 – 37.05.146, receipts from authorized state programs are accounted for separately and appropriated to administer the source program, implement laws related to the program, or cover costs associated with collecting the receipts. Some programs with program receipt authority are not included in our Charges for Services category because they are reported elsewhere in this forecast or because they do not generate revenue available for general appropriation.

We forecast program receipt revenues

based on discussions with the Governor’s Office of Management and Budget and analysis of the most recent budget expectations for these categories.

Program receipts listed in this section are

- Receipt supported services, which includes state services such as Pioneers homes and occupational licensing that are funded by program receipts. Some seafood assessments are included in this category.
- Statutorily designated program receipts, which include money received from sources other than the state or federal government and restricted by the terms of a gift, grant, bequest or contract.
- Regulatory Commission of Alaska (RCA) receipts, which are regulatory cost charges and user fees levied on utilities and pipelines to fund costs of regulation.
- Test fisheries receipts, generated by the Department of Fish and Game from selling fish caught during testing the commercial viability of fisheries.
- Timber sale receipts, which are used to fund the timber disposal program of the Department of Natural Resources.
- Oil and Gas Conservation Commission receipts, which are fees and charges for regulation of oil and gas wells and pipelines.
- Business license fees collected by the Department of Commerce, Community and Economic Development.

Figure 5-4. Charges for Services, FY 2009 and Forecasted FY 2010-2011 (\$ million)

Unrestricted	History	Forecast	
	FY 2009	FY 2010	FY 2011
General Government	8.8	9.5	12.7
Natural Resources	2.0	2.0	2.0
Other	8.5	8.5	8.5
Total Unrestricted	19.3	20.0	23.2
Restricted			
General Government	17.0	5.7	5.7
Natural Resources	0.5	0.5	0.5
Cruise Ship Ranger Fee	3.9	3.6	3.4
Environmental Compliance Fees	1.2	1.0	1.0
Marine Highway Receipts	46.2	51.1	52.5
Receipt Supported Services	124.7	107.0	107.0
Statutorily Designated	33.2	64.9	64.9
RCA Receipts	9.1	9.7	9.7
Test Fisheries Receipts	1.0	2.5	2.5
Timber Sale Receipts	0.6	0.8	0.8
Oil & Gas Conservation	4.6	5.5	5.5
DCCED Business Licenses	8.9	4.9	4.9
Total Restricted	250.9	257.2	258.4
Grand Total	270.2	277.2	281.6

Figure 5-5. Fines & Forfeitures, FY 2009 and Forecasted FY 2010-2011 (\$ million)

Unrestricted	History	Forecast	
	FY 2009	FY 2010	FY 2011
Fines & Forfeitures	10.5	8.9	8.9
Total Unrestricted	10.5	8.9	8.9
Restricted			
Tobacco Settlement (North Tobacco Securitization Corporation)	29.8	27.7	26.7
Tobacco Settlement (Tobacco Use Education & Cessation Fund)	7.5	6.9	6.7
Other	1.8	1.5	1.5
Total Restricted	39.1	36.1	34.9
Grand Total	49.6	45.0	43.8

Fines and Forfeitures

Fines and forfeitures include civil and criminal fines and forfeitures and money received by the state from the settlement of civil lawsuits. The largest single source of receipts under this category is the multi-state tobacco settlement. Other sources are forecast based on fiscal year-to-date collections and historical averages.

Tobacco Settlement

The tobacco Master Settlement Agreement was signed by 46 states (including Alaska) in November 1998 and dictates annual payments to each of the states. All tobacco settlement revenue is considered restricted for purposes of this forecast. Eighty percent of the settlement revenue is earmarked for the Northern Tobacco Securitization Corporation for payments on bonds that were sold based on the future revenue stream. The remaining 20% of the revenue is deposited into the Tobacco Use Education and Cessation Fund, a subfund of the General Fund.

Tobacco settlement payments are based on a complex formula that takes into account several factors including declines in cigarette consumption, inflation and certain adjustments for litigation expenses and market share losses related to the settlement. We forecast that cigarette consumption will decline at an annual rate of 4% and inflation will be 2.75%.

Licenses and Permits

Licenses and permits represent government revenue derived from charges for participating in activities regulated by the state. The majority of the receipts under this category are from motor vehicle registration and fishing and hunting license fees. Alcoholic beverage license fees are also forecast separately. There are several other small license and permit fees which are summarized in the Other Fees category.

Alcoholic Beverage Licenses

Alcoholic beverage licenses are required to manufacture or sell alcoholic beverages in Alaska. Licenses are issued by the

Alcoholic Beverage Control Board and revenue is deposited into the General Fund. All of the revenue from biennial license fees collected within municipalities, excluding annual wholesale fees and biennial wholesale license fees, is shared with the municipalities and treated as restricted for purposes of this forecast. We forecast little change in revenue because alcoholic beverage license issuance is limited based on population.

Fishing and Hunting License Fees

Fishing and hunting licenses are issued by the Alaska Department of Fish and Game for participation in various fishing, hunting and related activities. The majority of these fees are appropriated to a special revenue fund called the Fish and Game Fund. Money in the fund may only be spent for fish and game management purposes. We forecast fishing and hunting license fee revenue based on expectations of the Alaska Department of Fish and Game.

Motor Vehicle Registration Fees

Motor vehicle registration fees are collected by the Division of Motor Vehicles within the Department of Administration. Most are considered unrestricted license and permit revenue; however, some registration fees are considered restricted receipt supported services and are reflected in the Charges for Services section of this forecast. We forecast motor vehicle registration fee revenue based on expectations of the Division of Motor Vehicles.

Rents and Royalties

Rents and royalties from sources other than oil and gas fall into two categories: mining rents and royalties and other non-petroleum rents and royalties.

All rents and royalties from oil and gas are reported in the Oil Revenue section of this forecast.

Mining Rents and Royalties

As with oil and gas production, the state earns revenue from other mineral production that occurs on state lands leased for exploration and development. As the landowner, the state earns revenue from leases as (1) upfront bonuses, (2) annual rent charges and (3) as a retained royalty interest in minerals production.

Until October 2008, only 25% of the rents and royalties were deposited in the Permanent Fund and 0.5% to the School Fund. With the repeal of House Bill 11 last year, the amount rose to 50% for leases issued after December 1979. The amount deposited into the School Fund remains unchanged. See the Executive Summary section for a more complete discussion of HB 11.

We forecast mining rents and royalties based on expected changes in minerals

prices as well as mine-specific forecasts for large mines on state land.

Other Non-Petroleum Rents and Royalties

The state receives revenue from the leasing, rental and sale of state land. While all of these revenues are deposited into the General Fund, some are deposited in subfunds of the General Fund and are treated as restricted for purposes of this forecast. This category includes revenues from leasing, rental and sale of state land that do not fall into the oil and gas or mining royalties categories. We forecast other non-petroleum rents and royalties based on analysis of fiscal year-to-date and historical collections.

Figure 5-6. Licenses & Permits, FY 2009 and Forecasted FY 2010-2011 (\$ million)

	History	Forecast	
	FY 2009	FY 2010	FY 2011
Unrestricted			
Alcoholic Beverage Licenses	1.0	1.0	1.0
Motor Vehicles	33.5	38.0	36.3
Other Fees	1.0	1.5	1.5
Total Unrestricted	35.5	40.5	38.8
Restricted			
Hunting & Fishing			
Hunting & Fishing Fees (Fish & Game Fund)	29.1	33.5	33.8
Sanctuary Fees (Fish & Game Fund)	0.3	0.3	0.3
Subtotal	29.4	33.8	34.1
Other Fees	4.5	4.5	4.5
Alcoholic Beverage License (municipal share)	0.8	0.9	0.9
Subtotal	5.3	5.4	5.4
Total Restricted	34.7	39.2	39.5
Grand Total	70.2	79.7	78.3

Other

This category includes unclaimed property transfers, transfers to the state from component organizations and miscellaneous revenues. Miscellaneous revenues, which include contributions to the state and other revenues, are projected based on analysis of fiscal year-to-date and historical collections. Unclaimed property and transfers from component organizations are discussed below.

Unclaimed Property

Alaska's Unclaimed Property statutes require businesses and corporations to report unclaimed intangible property to the state. Property is reportable if an owner cannot be located, the owner has not cashed a property check, or an account has not had any owner-initiated activity for at least three years. Unclaimed property may include checking accounts, customer deposits and over-payments, gift certificates, unpaid wages, and security related ac-

counts. The state holds the property in trust until the owner or his or her legal heir claims it. Each year the unclaimed property trust account is evaluated and the excess of the working trust balance is transferred to the General Fund.

A \$3.8 million transfer was processed during FY 2009. Transfers in FY 2010 and following years are expected to be \$4.0 million per year. We forecast unclaimed property revenue based on estimates prepared by the Unclaimed Property Group of the Department of Revenue.

Figure 5-7. Rents & Royalties, FY 2009 and Forecasted FY 2010-2011 (\$ million)

Unrestricted	History	Forecast	
	FY 2009	FY 2010	FY 2011
Mining Rents and Royalties	7.4	7.4	8.0
Other Non-Petroleum Rents and Royalties	8.2	6.2	6.2
Total Unrestricted	15.6	13.6	14.2
Restricted			
Mining Rents and Royalties	3.3	3.3	3.9
Other Non-Petroleum Rents and Royalties	4.1	5.7	5.7
Total Restricted	7.4	9.0	9.6
Grand Total	23.0	22.6	23.8

Transfers from Component Organizations

Each year, the state receives money in the form of transfers from component organizations, such as the Alaska Housing Finance Corporation, frequently in the form of dividends. Component organizations are covered in more detail in the Public Corporations & the University of Alaska section of this forecast. Some component organizations do not make transfers to the state, and as a result not all component organizations are listed here.

Actual transfers for FY 2009 are reflected in draft tables from the Comprehensive Annual Financial Report. Forecasts for FY 2010 and FY 2011 transfers are based on discussions with the Governor's Office of Management and Budget and analysis of the most recent budget expectations for these categories.

Transfers from component organizations presented under this category may differ from those presented in the Public Corporations & University of Alaska section for two reasons: (1) amounts in this section account differently for funds paid over time for multi-year capital projects; and (2) amounts in this section include funds that are transferred to the state and then appropriated to the component unit for operations.

Figure 5-8. Other Revenue, FY 2009 and Forecasted FY 2010-2011 (\$ million)

Unrestricted	History	Forecast	
	FY 2009	FY 2010	FY 2011
Miscellaneous	23.2	17.9	17.9
Unclaimed Property	3.8	4.0	4.0
Total Unrestricted	27.0	21.9	21.9
Restricted			
Alaska Housing Finance Corporation	12.4	62.5	62.5
Alaska Industrial Development & Export Authority	5.8	22.7	22.7
Alaska Municipal Bond Bank Authority	0.5	0.8	0.8
Alaska Student Loan Corporation	7.5	0.0	0.0
Alaska Energy Authority	0.0	0.0	0.0
Miscellaneous ⁽¹⁾	32.1	22.5	22.5
Total Restricted	58.3	108.5	108.5
Grand Total	85.3	130.4	130.4

⁽¹⁾ Revenue shown under account codes for "other" or "contributions" in the Alaska State Accounting System for General Fund subfunds and special revenue funds.



Revenue Sources Book

Alaska Department of Revenue – Tax Division

FALL 2009

6. Federal Revenue

Figure 6-1. FY 2009 Federal Revenue: \$2.1 billion

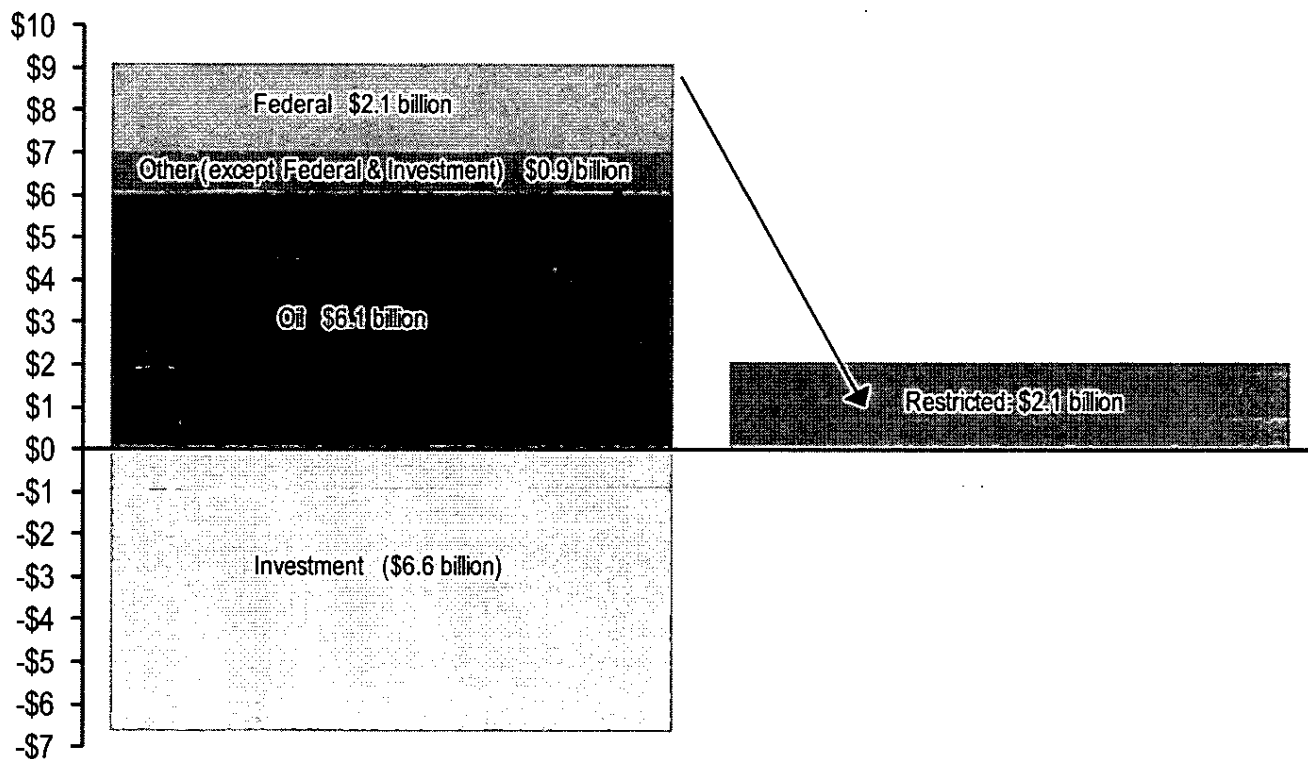


Figure 6-2. Total Federal Revenue to the State, FY 2009 and Forecasted FY 2010-2011 (\$ million)

	History	Forecast	
	FY 2009	FY 2010	FY 2011
Unrestricted			
Federal Receipts	0.0	0.0	0.0
Restricted			
Federal Receipts	2,088.4	2,916.7	2,916.7
Grand Total	2,088.4	2,916.7	2,916.7

General Discussion

The federal government continues to play a significant role in Alaska's economy. In Federal Fiscal Year (FFY) 2008 the federal government spent \$9.4 billion in total direct expenditures in Alaska.⁽¹⁾ The majority of that spending came from the activities of various federal agencies, including defense spending, procurement contracts, retirement and disability payments, wages, loans and grants. Another \$1.3 billion was spent on other federal assistance, such as loan guarantees and insurance.

Alaska has historically ranked first in per capita federal spending, however, increased federal expenditures to Louisiana and Mississippi after Hurricane Katrina and Rita in FFY 2006 dropped Alaska to third place. In FFY 2007, Alaska moved up, ranking second only

to Virginia. Maryland surpassed Alaska in per capita spending in FFY 2008 to put Alaska in third place out of all states again (see Figure 6-3). Historically, federal spending in Alaska has grown faster than total U.S. spending. However, for FFY 2007, federal direct expenditures in Alaska increased by only 1.4% from FFY 2006, while total U.S. federal expenditures increased by 4.4%. Federal spending grew at a slower rate in Alaska again in FFY 2008 with an increase of 0.5% in direct federal expenditures while overall federal spending increased 9.2%. In FFY 2005, the latest year for which data is available, Alaska received \$1.84 for every dollar paid in federal taxes.⁽²⁾

Among federal agencies, the Department of Defense spends the most in

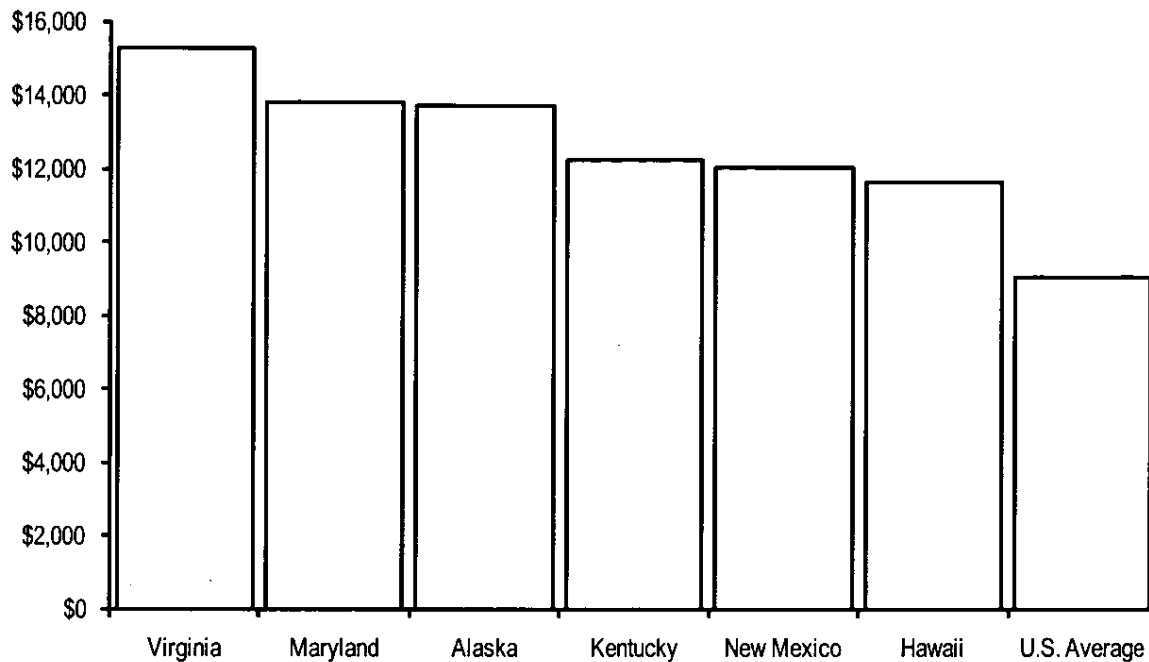
Alaska, followed by the Department of Health and Human Services. Together, these two departments account for 53% of all federal direct spending in the state. Not surprisingly, a large portion of federal money flows into Alaska through salaries of federal employees. However, 29% of all federal direct spending comes in the form of grants, mostly to state and municipal governments, and to nonprofit organizations.

In FY 2009, the State of Alaska received and spent nearly \$2.1 billion in federal funds. This federal funding is generally restricted to specific uses such as road improvements, Medicaid payments and aid to schools. Potential changes to federal law, differing federal and state fiscal years and varying numbers of eligible Alaskans in certain

⁽¹⁾ U.S. Census Bureau Consolidated Federal Funds Report for FFY 2008, U.S. Department of Commerce. <http://harvester.census.gov/cffr>.

⁽²⁾ Tax Foundation's "Federal Spending in Each State per Dollar of Federal Taxes," www.taxfoundation.org/research/show/266.html.

Figure 6-3. FFY 2008 Federal Spending per Capita, Top Six States



programs make forecasting federal revenue difficult. The estimates we present for FY 2010 and FY 2011 are from the Office of Management and Budget and are based on state agency projections of potential federal revenues.

In FY 2010, the budgeted amount of federal funds is \$2.9 billion. In FY 2009, the American Recovery and Reinvestment Act of 2009 played a critical part in the overall level of federal funding in the state budget. Approximately \$846.8 million or 24% of all federal funds, came as a result of ARRA. In FY 2010, the overall role of ARRA was significantly reduced, with a total of \$174.6 million which represents 6% of all federal funds. Most federal funding requires state matching money. The budgeted state match and the top three budgeted categories for federal spending in Alaska for FY 2009 and FY 2010

are included in Figure 6-5.

It is important to note that the state routinely budgets for federal funds in excess of expected allotments. The legislature authorizes state agencies to receive and spend the maximum that federally funded programs might receive, while the actual appropriation amounts are generally less. In addition, some of the funding granted for multi-year capital projects is received and spent in years following the one in which the money is procured. All federal funds, whether spent in the operating or capital budget, are restricted by legislative appropriation to specific uses.

Figure 6-4. Total Federal Spending in Alaska, FFY 2008

By Distributing**Agency**

	\$ Million	Percent
Defense	3,628.6	39%
Health & Human Services	1,359.3	14%
Social Security	844.5	9%
Other Agencies	3,590.4	38%
Total	9,422.7	100%

By Appropriation**Category**

	\$ Million	Percent
Grants	2,701.6	29%
Salaries & Wages	2,479.9	26%
Procurement	2,205.6	23%
Retirement & Disability	1,372.6	15%
Other Direct Payments	662.9	7%
Total	9,422.7	100%

Figure 6-5. Federal Spending, FY 2009 and Forecasted FY 2010-2011 (\$ million)

	History FY 2009	Budgeted FY 2010	Budgeted FY 2011
State Match Requirement			
Operating Budget	405.4	389.1	389.1
Capital Budget	53.7	40.7	40.7
Total	459.2	429.9	429.9

Top Spending Categories

Transportation Projects	886.7	748.4	748.4
Medicaid	770.4	795.0	795.0
Education (K-12, University of Alaska)	599.1	376.5	376.5

7. Investment Revenue

Figure 7-1. FY 2009 Investment Net Revenue: (\$6.6 billion)

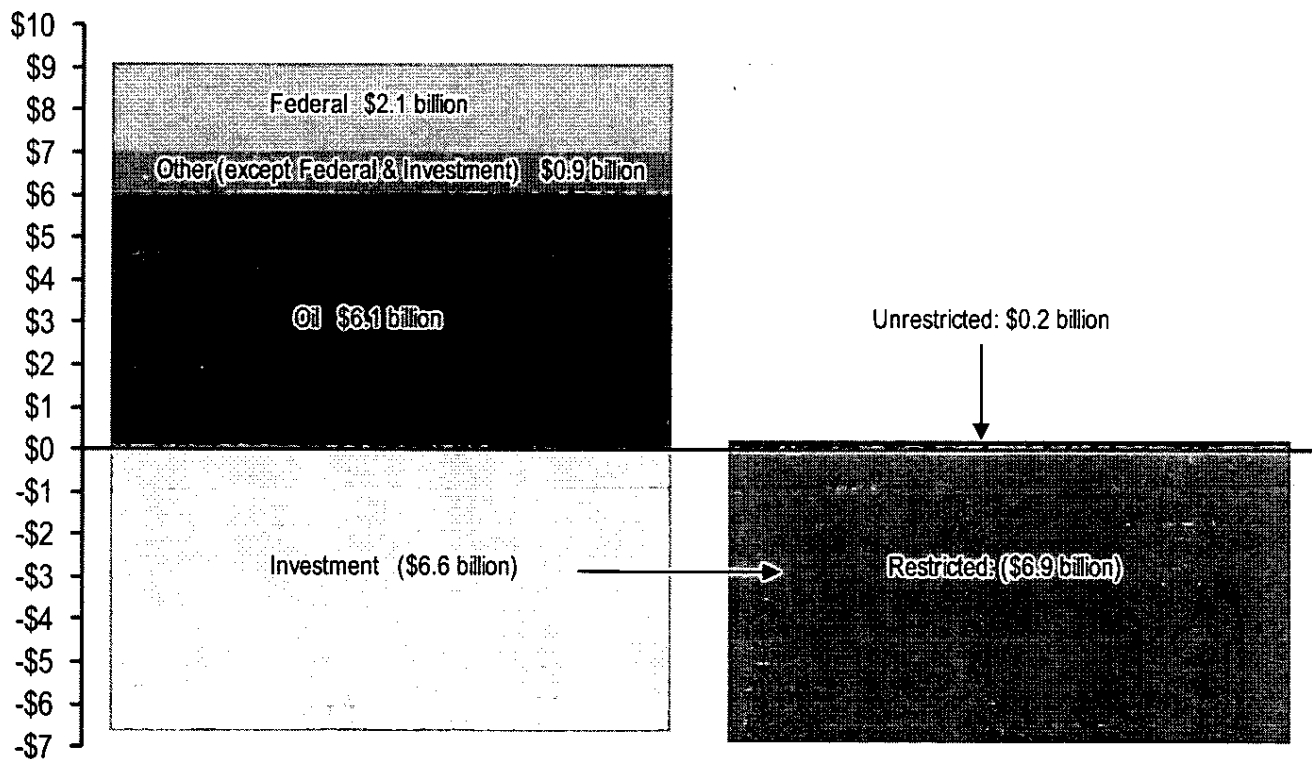


Figure 7-2. Total Investment Revenue, FY 2009 and Forecasted FY 2010-2011 (\$ million) ⁽¹⁾

Unrestricted	History	Forecast	
	FY 2009	FY 2010	FY 2011
Investments	247.4	219.7	181.8
Interest Paid by Others	0.2	1.4	1.4
Total Unrestricted	247.6	221.1	183.2
Restricted			
Investments	57.1	51.7	45.5
Constitutional Budget Reserve Fund	(526.6)	968.2	578.5
Other Treasury Managed Funds	(30.6)	49.9	26.3
Alaska Permanent Fund	(6,394.4)	2,237.6	2,602.5
Total Restricted	(6,894.5)	3,307.3	3,252.8
Grand Total	(6,646.9)	3,528.4	3,436.0

⁽¹⁾ Governmental Accounting Standards Board (GASB) principles require the recognition of changes in the value of investments as income or losses at the end of each trading day, whether the investment is actually sold or not.

Investment Forecast

To forecast investment revenue for the current fiscal year—FY 2010—we combine actual performance through September 30, 2009, with a projection for the remainder of the year. Forecasts and estimated capital market median returns are based on information supplied by the state's investment consultant, Callan Associates Inc., and their 5-year capital market estimated returns.

Unrestricted Investment Revenue

Unrestricted investment revenue is earned on the General Fund non-segregated investments managed by the Treasury Division. Interest Paid by Others is interest received by the state other than on its investments. Oil and gas royalty interest, production tax interest, and corporate income tax interest are included in the Oil Revenue section of this forecast.

Restricted Investment Revenue

Restricted investment revenue consists of earnings from governmental funds, the Constitutional Budget Reserve Fund (CBRF), other Treasury-managed governmental funds and the Alaska Permanent Fund.

Figure 7-3. Callan Associates Inc.'s 5-year Capital Market Estimated Returns, as of September 30, 2009

Asset Class	Benchmark for Asset Class	%/Year Median Expected Return	%/Year Expected Risk ⁽¹⁾
Equities			
U.S. Broad	Callan Associates Inc. (CAI) Broad	9.48%	16.40%
U.S. Large Cap	Standard and Poors (S&P) 500	9.22%	15.25%
U.S. Small Cap	Russell 2000 Index	10.04%	22.60%
International Equity	Morgan Stanley Capital International EAFE	9.25%	19.30%
Emerging Markets Equity	Morgan Stanley Capital International Emerging Markets	10.12%	27.00%
Fixed Income			
Domestic Broad Market	Lehman Brothers Aggregate	5.24%	5.00%
Domestic Short Term (cash equivalent)	Three-Month U.S. Treasury Bill	3.03%	0.80%
Domestic Intermediate	Merrill Lynch 1- to 5-Year Government	4.02%	3.00%
International	Salomon Brothers Non-U.S. Government	4.82%	9.60%
US TIPS	Lehman Brothers US TIPS Index	4.82%	6.00%
High Yield	Merrill Lynch US High Yield Master II Constrained	7.02%	11.70%
Other			
Real Estate	CRES	7.60%	16.10%
Private Equity	CPI + 5%	11.54%	37.00%
Absolute Return	91 Day T-Bill + 5%	6.93%	10.00%
Lazard Emerging Income Plus	1 Month Libor + 500 Basis Points	9.29%	10.00%
Conservative Aggregate	90% Lehman Aggregate / 10% Lehman Treasury Index	5.01%	5.05%
Inflation	CPI-U	2.75%	1.40%

⁽¹⁾The continued volatility in the world's financial markets makes focus on the "Expected Risk" column (far right in the table above) particularly appropriate. The numbers in the Expected Risk column represent a statistical measure called standard deviation, which is the most commonly used measure of risk in the investment world. The standard deviation is a measure of the dispersion of data around its mean. The analyst can use this measure of dispersion to provide a range of possible outcomes at any desired level of confidence. In the data in this table, the level of confidence is set at 67% or one standard deviation. A higher level of confidence would require a broader range. For example, Callan estimates an average annual return for the domestic broad market fixed-income asset class of 5.24% and an expected risk for that asset class of 5.0%. That means Callan is forecasting that two-thirds of the time the annual return for the domestic broad fixed-income asset class will fall between 0.24% (the median expected average annual return of 5.24% minus the expected risk of 5.0%) and 10.24% (the median expected return plus the expected risk). A prediction at 95% confidence would run from -4.76% to 15.24%, too broad a range to be useful. The probability that a particular asset class or portfolio will have a negative return over a given period of time is another way to reflect the riskiness of that asset class or portfolio.

Figure 7-4. Investment Revenue Summary, FY 2009 and Forecasted FY 2010-2011 (\$ million)

Asset Allocation

Treasury Pool	Percent Allocation	Performance Benchmark
Short-term, Fixed-income Pool	43%	Three-month U.S. Treasury Bill
Intermediate-term, Fixed-income Pool	57%	Merrill Lynch 1- to 5-year government index
Alaska Student Loan Corporation note	0%	

Investment Balance September 30, 2009	\$6,300.1
Projected Annual Rate of Return	3.6%
Probability of Negative Return Over 1 Year	2.5%

Actual Total Investment Income, FY 2008	275.4
Actual Total Investment Income, FY 2009	304.5
Projected Total Investment Income, FY 2010	271.4

	History	Forecast	
	FY 2009	FY 2010	FY 2011
Investment Revenue Unrestricted	247.4	219.7	181.8
Investment Revenue Restricted ⁽¹⁾	57.1	51.7	45.5
Total	304.5	271.4	227.3

⁽¹⁾ Includes subfunds of the General Fund.

Figure 7-5. Constitutional Budget Reserve Fund Cash Flows Investment Revenue Summary, FY 2009 and Forecasted FY 2010-2011 (\$ million)

Asset Allocation Regular Account

Treasury Pool	Percent Allocation	Performance Benchmark
Short-term, Fixed-income pool	9%	Three-month U.S. Treasury Bill
Intermediate-term, Fixed-income Pool	71%	Merrill Lynch 1- to 5-year government index
Broad Market Fixed-income Pool	20%	Lehman Brothers aggregate bond index

Regular Balance September 30, 2009	\$3,982.3
Projected Annual Rate of Return	4.2%
Probability of Negative Return Over 1 Year	8.0%

Asset Allocation Special Subaccount

Treasury Pool	Percent Allocation	Performance Benchmark
Broad Market Fixed-Income Pool	35%	Lehman Brothers Aggregate Bond Index
Domestic Equity Pool	44%	Russell 3000 Index
International Equity Pool	20%	MSCI EAFE Index
Lazard Emerging Income Plus	1%	1 Month Libor + 500 Basis Points

Special Subaccount Balance September 30, 2009	\$4,291.4
Projected Annual Rate of Return	7.87%
Probability of Negative Return Over 1 Year	23.26%

Total Investment Income	History	Forecast	
	FY 2009	FY 2010	FY 2011
Regular Account	143.7	213.5	207.0
Special Subaccount	(670.3)	754.7	371.5
Total	(526.6)	968.2	578.5

Figure 7-6. Constitutional Budget Reserve Fund Cash Flows, FY 2009 and Forecasted FY 2010-2011
(\$ million)

	History	Forecast	
	FY 2009	FY 2010	FY 2011
Beginning Cash Balance CBRF	5,601.3	7,114.4	9,111.2
Beginning Main Account Balance	1,134.1	3,317.5	4,559.6
Earnings on Main Account Balance ⁽¹⁾	143.7	213.5	207.0
Petroleum Tax, Royalty Settlements ⁽²⁾⁽³⁾	121.6	440.7	20.0
(Loan to GF)/Repayment to CBRF ⁽⁴⁾	1,918.1	161.5	0.0
Draw from/to GF	0.0	426.4	535.3
Ending Main Account Balance	3,317.5	4,559.6	5,321.9
Beginning Special Subaccount Balance	4,467.2	3,796.9	4,551.6
Earnings on Special Subaccount Balance ⁽¹⁾	(670.3)	754.7	371.5
Transfer from Main Account	0.0	0.0	0.0
Ending Special Subaccount Balance	3,796.9	4,551.6	4,923.1
Total CBRF Balance	7,114.4	9,111.2	10,245.0

⁽¹⁾ The earnings estimate for the main account is 4.179% and the earnings estimate for the special subaccount is 7.872%. These projections are based on 2009 Callan's capital market assumptions and Department of Revenue, Treasury Division's asset allocation.

⁽²⁾ The petroleum tax, royalty settlements number on this sheet is shown on a cash basis. Please note the state accounting system numbers presented elsewhere in this book include accruals and therefore may differ from the numbers presented here.

⁽³⁾ Settlement estimates are provided by the Department of Revenue and Department of Law, net of annual Federal Minerals Management Service payments.

⁽⁴⁾ Repayment from the General Fund to the CBRF is indicated by a positive dollar amount; loan from the CBRF to the General Fund is indicated by a negative dollar amount.

Figure 7-7. Public School Trust Investment Revenue Summary, FY 2009 and Forecasted FY 2010-2011
(\$ million)

Asset Allocation

Treasury Pool	Percent Allocation	Performance Benchmark
Broad Market Fixed-income Pool	57%	Lehman Brothers aggregate index
Domestic Equity Pool	43%	Russell 3000 Index

Public School Fund Balance September 30, 2009	\$367.9
Projected Annual Rate of Return	7.0%
Probability of Negative Return Over 1 Year	19.3%

Total Investment Income & Distributable Income (\$ million)

Unrestricted	History	Forecast	
	FY 2009	FY 2010	FY 2011
Public School Trust Total Investment Income	(28.4)	48.2	25.5
Public School Trust Distributable Income	5.2	10.5	14.4

Figure 7-8. Alaska Children's Trust Investment Revenue Summary, FY 2009 and Forecasted FY 2010-2011
(\$ million)

Asset Allocation

Treasury Pool	Percent Allocation	Performance Benchmark
Broad Market Fixed-income Pool	25%	Lehman Brothers aggregate index
International Equity Pool	15%	Morgan Stanley Capital International (EAFE)
Domestic Equity Pool	60%	Russell 3000 Index

Alaska Children's Fund Balance September 30, 2009	\$9.7
Projected Annual Rate of Return	8.3%
Probability of Negative Return Over 1 Year	24.8%

Total Investment Income & Distributable Income (\$ million)

Unrestricted	History	Forecast	
	FY 2009	FY 2010	FY 2011
Alaska Children's Trust Total Investment Income	(2.2)	1.7	0.8
Alaska Children's Trust Distributable Income	0.2	0.2	0.3

Figure 7-9. Alaska Permanent Fund Managed by the Alaska Permanent Fund Corporation, FY 2009 and Forecasted FY 2010-2011 (\$ million)

Reserved Assets — Principal	History	Forecast	
	FY 2009	FY 2010 ⁽¹⁾	FY 2011 ⁽²⁾
Total Reserved Assets – Beginning Balance	31,213.2	29,496.1	31,586.9
Contributions & Appropriations			
Contributions & Appropriations – Beginning Balance	29,148.9	30,944.7	31,546.4
Dedicated Petroleum Revenue	651.4	601.7	672.8
Inflation Proofing Transfer from Realized Earnings	1,144.3	0.0	886.0
Subtotal Contributions & Appropriations	30,944.7	31,546.4	33,105.2
Unrealized Appreciation/Depreciation			
Appreciation/Depreciation – Beginning Balance	2,064.3	(1,448.6)	40.5
Annual Unrealized Gain/Loss	(3,512.9)	1,489.1	1,133.2
Subtotal Unrealized Appreciation/Depreciation	(1,448.6)	40.5	1,173.7
Total Reserved Assets – Ending Balance	29,496.1	31,586.9	34,278.9
Unreserved Assets — Realized Earnings Account			
Total unreserved assets - beginning balance	5,320.7	420.0	578.4
Realized Earnings Account			
Realized Earnings Account – Beginning Balance	4,968.8	440.6	577.3
Annual Realized Earnings	(2,509.0)	726.7	1,452.2
Dividend Payment to State of Alaska ⁽³⁾	(874.8)	(590.0)	(637.0)
Inflation Proofing Transfer to Reserved Assets	(1,144.3)	0.0	(886.0)
Other Appropriations Out of Fund	0.0	0.0	(3.0)
Realized Earnings Account – Ending Balance	440.6	577.3	503.5
Unrealized appreciation/depreciation ⁽⁴⁾			
Appreciation/depreciation - beginning balance	351.9	(20.6)	1.1
Annual unrealized gain/loss	(372.5)	21.7	17.1
Sub total - unrealized appreciation/depreciation	(20.6)	1.1	18.2
Total Unreserved Assets – Ending Balance	420.0	578.4	521.7
Market Value – Total Fund Invested Assets Value			
Reserved Fund Balance - end of year	29,496.1	31,586.9	34,278.9
Unreserved Fund Balance - end of year	420.0	578.4	521.7
Fund Balance (market value) End-of-year Balance	29,916.0	32,165.3	34,800.6
Total Reported Earnings			
Annual Unrealized Gain/Loss	(3,885.4)	1,510.8	1,150.3
Annual Realized Earnings	(2,509.0)	726.7	1,452.2
Reported Earnings	(6,394.4)	2,237.6	2,602.5

⁽¹⁾FY 2010 data projected using Callan 2009 capital market assumptions and May 2009 asset allocation resolution, resulting in an 7.70% median expected total return. Inflation based on actual through September 2009.

⁽²⁾FY 2011 projected using Callan 2009 capital market assumptions and May 2009 asset allocation resolution, resulting in an 8.28% expected total return, and 2.75% inflation.

⁽³⁾The permanent fund dividend payment is recorded as a liability at fiscal year end, and is paid out the following month.

⁽⁴⁾Beginning in FY 2009, and applied retroactively, Department of Law opinion required an allocation of unrealized gains and losses to the unreserved assets of the Fund.

8. State Endowment Funds

This section compares important attributes of six endowment funds. The University of Alaska endowment is included in this comparison because it is one of Alaska's public endowment funds that uses the annual distribution calculation method typical of the vast majority of endowments in the United States and Canada.⁽¹⁾

The fiduciary for each of these endowment funds has the responsibility for establishing an asset-allocation policy for the fund. Figure 8-1 on the next page compares the asset-allocation policies for these endowments.

Under the standards adopted by the Governmental Accounting Standards

Board (GASB), public funds calculate and report their income by recognizing changes in the value of securities as income, or losses, as they occur at the end of each trading day. They do this regardless of whether the securities are actually sold and the income, or losses, are taken or realized. All six of these endowments report annual income on this basis. However, as reflected in Figure 8-2 on the next page, four of them use other measures of annual income for determining their distributions. These include the Alaska Permanent Fund and the Mental Health Trust Fund, both administered by the Alaska Permanent Fund Corporation, the Public School Trust and the Alaska Children's Trust.

In determining the amount of income available for distribution each year for the two funds managed by the Alaska Permanent Fund Corporation, gains or losses on individual investments are not recognized until the investment is sold. For calculating distributable income for the Public School Trust and the Alaska Children's Trust, only interest earned and dividends received are treated as income. Gains and losses in the value of individual investments are never recognized as income. By law, those gains and losses remain with the principal of the fund. Figure 8-3 explains how distributable income for each of the endowments is determined.

⁽¹⁾ The predominant practice, making annual distributions of 4% to 5% of the market value of the endowment, developed following a 1968 Ford Foundation study. See *The Ford Foundation Managing Educational Endowments* (New York, New York; 1968).

Figure 8-1. Target Percent Asset Allocation—State Endowment Funds

	Cash	U.S. Bonds	International Bonds	U.S. Equities	International Equities	Global Equities	Real Estate	Alternative Investments	Total
Alaska Permanent Fund	2	19	3	24	24	0	12	16	100
Mental Health Trust	2	19	3	24	24	0	12	16	100
Public School Trust	0	57	0	43	0	0	0	0	100
Alaska Children's Trust	0	25	0	60	15	0	0	0	100
Power Cost Equalization	0	37	0	43	20	0	0	0	100
University of Alaska Endowment	3	17.5	0	26	11	10	8.5	24	100

Figure 8-2. Calculation of Annual Income—State Endowment Funds

	Financial Reporting of Income	Distributable Income
Alaska Permanent Fund	GASB (recognize gains and losses based on change in market value)	Interest earnings + dividends paid + gains and losses on investments actually sold
Mental Health Trust	GASB (recognize gains and losses based on change in market value)	Interest earnings + dividends paid + gains and losses on investments actually sold
Public School Trust	GASB (recognize gains and losses based on change in market value)	Interest earnings + dividends paid; gains and losses on value of securities are never income, they become part of principal
Alaska Children's Trust	GASB (recognize gains and losses based on change in market value)	Interest earnings + dividends paid; gains and losses on value of securities are never income, they become part of principal
Power Cost Equalization Endowment	GASB (recognize gains and losses based on change in market value)	GASB (recognize gains and losses based on change in market value)
University of Alaska Endowment	GASB (recognize gains and losses based on change in market value)	GASB (recognize gains and losses based on change in market value)

Figure 8-3. Distributable Income Determination—State Endowment Funds**Alaska Permanent Fund**

The annual distribution for the Permanent Fund Dividend follows the formula in AS 37.13.140-150, which specifies that 10.5% of the past five years' total realized income shall be paid out as dividends but also sets the limitation that the annual distribution may never exceed 50% of the balance in the fund's Realized Earning Account (REA). The 50% limitation has never been triggered.

Mental Health Trust

The Mental Health Trust Board adopted a policy, beginning in FY 2001, to distribute 3.5% a year of the market value of the fund's total assets. The distribution rate had been 3% for FY 1996-1998 and 3.25% for FY 1999-2000. Because of recent declines in market value, the board is exploring a redefinition of "principal" so that losses in market value would be proportionally allocated to the principal account and the earnings account rather than assigning the entire value of any losses to the earning account.

Public School Trust

The annual distribution is 4.75% of a five-year moving average of the fund's principal market value so long as that amount does not exceed the interest and dividend earnings available in the earnings account. The trust has accumulated a sizable earnings account balance, providing a cushion for the fund to maintain its annual distributions in a sustained bear market.

Alaska Children's Trust

The annual distribution is 4.75% of a five-year moving average of the fund principal's market value so long as that amount does not exceed the interest and dividend earnings available in the earnings account. The trust has accumulated a sizable earnings account balance, providing a cushion for the fund to maintain its annual distributions in a sustained bear market.

Power Cost Equalization Endowment

The annual distribution is 7% of the fund's market value. For the initial transition years, state statute specifies that the fund shall use the market value on February 1 for the subsequent fiscal year's distribution. Thereafter, the fund is to distribute each year 7% of the monthly average market value for a specified 36-month period.

University of Alaska Endowment

The annual distribution is 5% of a 5-year moving average of the market value of the fund.

Figure 8-4. Inflation-Proofing Procedures—State Endowment Funds**Alaska Permanent Fund**

An annual appropriation is needed to inflation proof the principal of the Permanent Fund (but not the accumulated earnings) pursuant to AS 37.13.145. The legislative appropriation requires a transfer from the Realized Earnings Account to the fund's principal an amount equal to the calculated U.S. Consumer Price Index's effect on the value of the principal, comprised of oil and gas royalty contributions and legislative appropriations. The Alaska Permanent Fund Corporation's Trustees have proposed a constitutional amendment that would inflation proof the entire fund—the principal and accumulated earnings—by limiting the annual distribution of earnings to 5% of a five-year moving average of the market value of the fund.

Mental Health Trust

The Mental Health Trust Authority has adopted two policies to inflation proof the fund. First, it limits distributions to 3.5% of the fund's market value. (The authority's ultimate goal, after further building up the principal, is to distribute 5% of the fund's market value each year, which would still allow enough retained earnings to inflation proof the fund.) Second, the authority also has adopted a policy transferring money from the reserve account to the principal whenever the reserve exceeds four times the annual income distribution, to help build up the fund's principal.

Public School Trust

The asset-allocation policy is such that—when combined with the requirement that the fund's capital gains and losses remain part of the principal—the retained capital gains are adequate to inflation proof the fund.

Alaska Children's Trust

The asset-allocation policy is such that—when combined with the requirement that the fund's capital gains and losses remain part of the principal—the retained capital gains are adequate to inflation proof the fund.

Power Cost Equalization Endowment

The legislature, in selecting a 7% distribution policy, expressly elected not to inflation proof this fund, but rather to distribute all, or almost all, of its anticipated annual earnings.

University of Alaska Endowment

The university's distribution policy of 5% of the moving five-year average of the fund's market value should allow for retained earnings to inflation proof the fund.

9. Public Corporations & University of Alaska

Public Corporations

The state has established the following public corporations to carry out certain public policies:

- Alaska Housing Finance Corporation (AHFC)
- Alaska Industrial Development and Export Authority (AIDEA)
- Alaska Energy Authority (AEA)
- Alaska Student Loan Corporation (ASLC)
- Alaska Municipal Bond Bank Authority (AMBBA)
- Alaska Aerospace Development Corporation (AADC)
- Alaska Railroad Corporation (ARC)

These seven corporations and the University of Alaska are components of state government whose activities

are accounted for in the state's Comprehensive Annual Financial Report separately from the activities of primary state government. Information in this section is provided by these corporations.

Four of these corporations pay some portion of their income as an annual "dividend" to the state. They include the Alaska Housing Finance Corporation, Alaska Industrial Development Authority, Alaska Student Loan Corporation and Alaska Municipal Bond Bank Authority.

The members of the AIDEA Board of Directors also serve as Board of Directors of AEA, though AIDEA and AEA continue to exist as separate legal entities. AEA has no employees, and AEA contracts to have AIDEA employ-

ees administer AEA programs. Other corporations have their own staffs and boards. While neither the sale of bonds nor the expenditure of bond proceeds by these corporations are subject to the state's Executive Budget Act, expenditures for the day-to-day administration of all of these corporations except the Alaska Railroad are subject to the Executive Budget Act.

The Alaska Commission on Postsecondary Education (ACPE) administers the ASLC programs. The ASLC has no employees, and the executive director of the ACPE serves as the executive officer of the ASLC.

The six figures that follow in this section summarize the activities of these corporations.

Figure 9-1. Public Corporations—Missions. What does the corporation do and how does it do it?**Alaska Housing Finance Corporation**

Using proceeds from the sale of bonds backed by its corporate assets, AHFC purchases home mortgages from Alaska banks. Income from payments on these mortgages repays bond holders and adds to the corporation's income, thereby enabling the corporation, since FY 1991, to pay an annual dividend and/or return of capital to the state. In addition to ensuring that Alaskans, especially Alaskans of low and moderate income and those in remote and underdeveloped areas of the state, have adequate housing at reasonable cost, the corporation administers federally and state funded multi-residential, senior and low-income housing, residential energy and home weatherization programs. In recent years, the legislature has authorized AHFC to finance the construction of schools, University of Alaska housing and other capital projects identified by the legislature.

Alaska Industrial Development and Export Authority

By lending money, guaranteeing loans or becoming an owner, AIDEA makes financing available for industrial, export and other business enterprises in Alaska. The corporation earns money from interest on its loans, investments, leases and operations of its properties. The corporation has paid an annual dividend to the state since FY 1997.

Alaska Energy Authority

AEA provides loans to utilities, communities and individuals to pay for the purchase or upgrade of equipment and for bulk fuel purchases. Additionally, the agency administers the Power Cost Equalization program, subsidizing rural electric costs with the Power Cost Equalization Endowment. AEA also receives federal and state money to provide technical advice and assistance in energy planning, emergency response management, energy infrastructure construction and conservation in rural Alaska. AEA owns and, under contractual agreements, operates and maintains state-owned power projects, such as Bradley Lake and the Alaska Intertie.

Alaska Student Loan Corporation

The Alaska Student Loan Corporation uses proceeds from bond sales to finance education loans made by the Alaska Commission on Postsecondary Education. Loan repayments satisfy bond obligations and enhance the corporation's capital asset base. Alaska statutes authorize the board of directors to annually declare a return to the state of a portion of its net income. The board has declared return of capital payments for each year beginning in FY 2001 through FY 2007. Alaska statutes also authorize the corporation to issue bonds for the purpose of financing projects of the state. Those bonds in aggregate may not exceed \$280 million.

Alaska Municipal Bond Bank Authority

The Bond Bank loans money to Alaska municipalities for capital improvement projects. The bank's larger capital base, its reserve funds and its credit rating enable it to sell bonds at lower interest rates than the municipalities could obtain on their own. The Bond Bank earns interest on the money it holds in reserve and has returned a dividend to the state every year since 1977.

Alaska Aerospace Development Corporation

The corporation operates and maintains a commercial spaceport in Kodiak, Alaska and provides commercial rocket vehicle launch support services. It promotes space-related business, research, education and economic growth in the State of Alaska.

Alaska Railroad Corporation

The corporation operates freight and passenger rail services between Seward and Fairbanks, including a spur line to Whittier. In addition, the corporation generates revenues from real estate it owns.

Figure 9-2. Public Corporations—State Capitalization. How did the state capitalize the corporation?

Alaska Housing Finance Corporation

The legislature appropriated \$739.9 million in cash and \$292.5 million in mortgages held by the General Fund to the corporation between 1976 and 1984. The payments on those mortgages and additional mortgages purchased with the cash have helped build the corporation's asset base and allow it to return some capital to the state each year. In 1993, AHFC received an additional \$27.7 million in cash and \$9.3 million in equity when the legislature merged the Alaska State Housing Authority with this corporation.

Alaska Industrial Development and Export Authority

Between 1981 and 1991, the State of Alaska transferred various loan portfolios worth \$297.1 million and \$69.2 million in cash to this corporation.

Alaska Energy Authority

The legislature established the AEA in 1976 to finance and operate power projects. This corporation has also administered rural energy programs at various times, including the present. As a result of legislatively mandated reorganizations, capital has moved into and out of the corporation. At the end of FY 2001, this corporation reported contributed capital of \$963.5 million.

Alaska Student Loan Corporation

In FY 1988, the state transferred \$260 million of existing student loans to this corporation. Additional appropriations of cash between FY 1988 and FY 1992 totaled \$46.7 million.

Alaska Municipal Bond Bank Authority

Between 1976 and 1986, the legislature appropriated \$18.6 million to the Bond Bank to be used for backing bond issues. In addition, the legislature gave the Bond Bank \$2.5 million in 1981 to fund a direct loan by a municipality. The municipality repaid the loan and the Bond Bank retained the appropriation.

Alaska Aerospace Development Corporation

Since 1993, the state has contributed \$10.9 million from the Science and Technology Endowment.

Alaska Railroad Corporation

The state bought the railroad from the federal government in 1985. The purchase price of \$22.7 million was recorded as the state's capitalization.

Figure 9-3. Public Corporations—Financial Facts, FY 2009 (\$ million) ⁽¹⁾

	Total Assets	Assets Less Liabilities Book Value	Unrestricted Net Assets	FY 2009 Operating Budget	Total Positions ⁽²⁾
Alaska Housing Finance Corporation	4,731.4	1,672.1	734.4	51.2	372.0
Alaska Industrial Development & Export Authority ⁽³⁾	1,183.5	974.5	888.1	8.2	73.0
Alaska Energy Authority ⁽³⁾	773.0	626.7	453.2	33.2	See AIDEA ⁽⁴⁾
Alaska Student Loan Corporation ⁽⁵⁾	742.7	180.6	140.7	12.0	103
Alaska Municipal Bond Bank Authority	638.0	43.7	12.0	0.6	0.5
Alaska Aerospace Development Corporation ⁽⁶⁾	103.2	91.5	4.4	28.5	47
Alaska Railroad Corporation ⁽⁷⁾	854.1	179.7	0.0	97.5	715

⁽¹⁾ All figures are effective as of June 30, 2009, except for the Alaska Railroad which reports on a calendar year basis.

⁽²⁾ Permanent Full Time (PFT), Permanent Part Time (PPT) and Temporary (TMP) are included in total positions.

⁽³⁾ The Alaska Industrial Development and Export Authority (AIDEA) and Alaska Energy Authority (AEA) report financial data on a fiscal year basis. Assets, liabilities and net assets in the table are from audited June 30, 2009 financial statements.

⁽⁴⁾ AIDEA provides staff for the activities of AEA. A significant portion of AIDEA's 73 member staff is engaged in AEA programs.

⁽⁵⁾ Budget and positions reported are for the Alaska Commission on Postsecondary Education (ACPE). Budget amount reported is funded by the Alaska Student Loan Corporation (ASLC). ACPE staff serve as staff for the ASLC.

⁽⁶⁾ Based on audited financial statements.

⁽⁷⁾ The Alaska Railroad reports financial data on a calendar year basis. Assets and book value shown in this table are from audited December 31, 2008, financial statements. The operating budget figure shown here is for CY 2009.

Figure 9-4. Public Corporations—Revenue & Net Income, FY 2009 (\$ million)

	Revenue	Operating Income	Net Income
Alaska Housing Finance Corporation	355.4	21.4	5.9
Alaska Industrial Development & Export Authority ⁽¹⁾	75.8	46.2	28.6
Alaska Energy Authority ⁽¹⁾	207.1	(31.8)	30.1
Alaska Student Loan Corporation	40.0	6.8	3.7
Alaska Municipal Bond Bank Authority	27.6	0.8	1.5
Alaska Aerospace Development Corporation ⁽²⁾	19.7	(5.0)	(3.9)
Alaska Railroad Corporation ⁽³⁾	177.9	3.3	12.6

⁽¹⁾ The Alaska Industrial Development and Export Authority and Alaska Energy Authority report financial data on a fiscal year basis. Revenue, operating income and net income in the table are from audited June 30, 2009 financial statements.

⁽²⁾ The Alaska Aerospace Development Corporation financial data include depreciation of \$5.9 million and are based on audited June 30, 2009 financial statements.

⁽³⁾ The Alaska Railroad reports financial data on a calendar year basis. Revenue and Operating Income shown in this table are for CY 2008.

Figure 9-5. Public Corporations—Dividends to the State. How, if at all, does the corporation pay dividends to the state?

Alaska Housing Finance Corporation

The Twenty-Third Legislature, in 2003, enacted SCSHB 256 (the "2003 Act") which added language to the Alaska Statutes to modify and incorporate the Transfer Plan. As approved and signed into law by the Governor, the Transfer Plan calls for annual transfers as follows: FY 2005, \$103 million; FY 2006, \$103 million; FY 2007, the lesser of 95% net income or \$103 million; FY 2008, the lesser of 85% net income or \$103 million; FY 2009 and thereafter, the lesser of 75% of the corporation's net income or \$103 million.

Alaska Industrial Development and Export Authority

By statute, AIDEA must make available to the state each year not less than 25% and not more than 50% of its total net income for a base year, defined as the year two years prior to the dividend year. The dividend is further limited to no more than the total amount of its unrestricted net income in the base year (AS 44.88.088). Net income is defined in the statutes.

Alaska Energy Authority

AEA does not pay a dividend or return capital to the state on a regular basis. However, in FY 2000 this corporation returned \$55.6 million of contributed capital to the Railbelt Energy Fund and the General Fund.

Alaska Student Loan Corporation

This corporation, at the discretion of its board of directors, may make available to the state a return of contributed capital or dividend for any base year in which the net income of the corporation is \$2 million or more. A base year is defined as the year two years before the payment year. If the board authorizes a payment, it must be between 10% and 35% of net income for the base year (AS 14.42.295). The corporation may also issue bonds in an aggregate amount not to exceed \$280 million, for the purpose of financing projects of the state as those projects may be identified by law (AS 14.42.220).

Alaska Municipal Bond Bank Authority

By statute, the Bond Bank annually returns earnings or income of its reserve fund, in excess of expenses, to the state.

Alaska Aerospace Development Corporation

AADC does not pay a dividend or return capital to the state.

Alaska Railroad Corporation

The corporation does not pay a cash dividend to the General Fund.

Figure 9-6. Public Corporations—Operating Expenses & Dividends (\$ million)

	Expenses		Dividends	
	Actual FY 2009	Budget FY 2010	Actual FY 2009	Budget FY 2010
Alaska Housing Finance Corporation ⁽¹⁾	48.6	53.2	65.9	68.7
Alaska Industrial Development & Export Authority	9.3	8.9	23.8	22.7
Alaska Energy Authority ⁽²⁾	42.6	36.5	na	na
Alaska Student Loan Corporation	11.6	12.2	9.1	0.0
Alaska Municipal Bond Bank Authority	0.6	0.7	0.8	0.3
Alaska Aerospace Development Corporation ⁽³⁾	23.6	28.6	na	na
Alaska Railroad Corporation	na	na	na	na

⁽¹⁾ Because some of this money is earmarked for multi-year capital projects, actual cash transfers in any given year may vary.

⁽²⁾ The Alaska Industrial Development and Export Authority and Alaska Energy Authority report financial data on a fiscal year basis. Actual operating expenses and dividends are for the fiscal year ended June 30, 2009.

⁽³⁾ The Alaska Aerospace Development Corporation financial data include depreciation of \$5.9 million and are based on audited June 30, 2009 financial statements.

University of Alaska

Figure 9-7. University of Alaska (\$ million)

Lands & Facilities June 30, 2009	Total Assets June 30, 2009	Unrestricted Net Assets	FY 2010 Operating Budget	FY 2010 Total Positions
\$834.0 ⁽¹⁾	\$1,195.4	\$107.1	\$823.2	4,916

⁽¹⁾ Includes depreciation of \$715.8 million.



Revenue Sources Book

Alaska Department of Revenue – Tax Division

FALL 2009

10. Appendices

A. Revenue

A-1	Glossary of Terms Used in this Revenue Sources Book	84
A-2	General Fund Unrestricted Revenue Sensitivity Matrices, FY 2010-2012.....	85
A-3	General Purpose Unrestricted Revenue—History.....	86
A-4a	General Purpose Unrestricted Petroleum Revenue—History.....	88
A-4b	General Purpose Unrestricted Petroleum Revenue—Forecast.....	89
A-5a	Total Alaska Government Petroleum Revenue—History.....	90
A-5b	Total Alaska Government Petroleum Revenue—Forecast.....	91

B. Prices

B-1a	Crude Oil and Natural Gas Prices—History	92
B-1b	Crude Oil and Natural Gas Prices—Forecast.....	93
B-2a	Nominal Netback Costs—History	94
B-2b	Nominal Netback Costs—Forecast	95
B-3	Price Changes from Spring 2009 Forecast	96

C. Production

C-1	Production Changes from Spring 2009 Forecast.....	97
C-2a	Crude Oil Production—History	98
C-2b	Crude Oil Production—Forecast	99
C-3a	Economic Limit Factor (for fields with Positive ELF)—History.....	100
C-3b	Economic Limit Factor (for fields with Positive ELF)—Forecast	101

Revenue. A-1

Glossary of Terms

Constitutional Budget Reserve Fund (CBRF)

Created by voters in 1990, the Constitutional Budget Reserve Fund receives proceeds from settlements of oil, gas, and mining tax and royalty disputes. The legislature may, with a three-quarters majority vote in each chamber, withdraw money from the fund.

Federal Revenue

Revenue appropriated from the federal government to the state with restrictions on how the money can be used. Highway and airport construction funds, Medicaid and education funding cannot be used for other purposes. In addition to restricting how the money is spent, the federal government often requires states to put up matching funds to qualify for the federal funding.

General Fund Revenue

General Fund Revenue has different meanings in different contexts. In the state's official financial reports, General Fund Revenue is used to designate the sum of General Purpose Unrestricted Revenue, General Fund sub-account revenue, program receipts and federal dollars spent through the General Fund. In budget-writing context, General Fund revenue has a definition similar to General Purpose Unrestricted Revenue.

Permanent Fund GASB (or Market) Income

Under standards adopted by the Governmental Accounting Standards Board (GASB), the Permanent Fund's income—and that of any other government fund—is the difference between the purchase price of the investments and their market value at a given point in time, plus any dividends, interest or rent earned on those investments.

Under GASB standards, the Permanent Fund does not have to sell the investment to count the gain or loss as it changes value. It is called "marking to market," that is, measuring the value of the fund's investments by the current market price. This can produce a much different picture than Permanent Fund statutory income, which does not reflect fluctuating investment values until the assets are sold.

Permanent Fund Statutory Income

Permanent Fund statutory income is the sum of realized gains and losses of all Permanent Fund investment transactions during the year, plus interest, dividends and rents earned by the fund. The Permanent Fund Dividend is based on statutory income. Though the legislature may appropriate the earnings for any purpose it chooses, the historical practice has been to restrict the use of realized income to dividends and inflation proofing, and then either leave the excess in the Realized Earnings Account or transfer it to the principal of the Permanent Fund.

Restricted Program Receipts

Revenue that is earmarked in state statute or by contract for specific purposes and is usually appropriated back to the program that generated the revenue. Examples include University of Alaska tuition payments, marine highway receipts, payments to various revolving loan funds and public corporation receipts. Some of this revenue is actually dedicated as a consequence of the provisions of Article 18, Section 11 of the Alaska Constitution. The remainder, while statutorily earmarked, may be appropriated to purposes other than those reflected in statute if the legislature so chooses.

Restricted Revenue

Restricted revenue represents revenue that is restricted by the constitution, state or federal law, trust or debt restrictions, or by customary practice. The legislature can at any time remove restrictions that are solely imposed by either Alaska statute or customary practice. Program receipts, revenues allocated to sub-accounts of the General Fund, and General Fund revenues customarily shared with other entities are all considered restricted revenues for the purposes of this report.

General Purpose Unrestricted Revenue

Revenue not restricted by the constitution, state or federal law, trust or debt restrictions or customary practice. Most legislative and public debate over the budget each year centers on this category of revenue. In deriving this figure from General Fund revenues, we have excluded General Fund sub-account revenue, as well as customarily restricted revenues such as shared taxes and marine highway receipts.

Revenue. A-2

General Purpose Unrestricted Revenue Matrices, with Price and Cost Sensitivity, FY 2010-2012 (\$ million)

FY 2010			
At forecasted production of 0.659 mmbbls/day			
ANS \$/barrel ⁽¹⁾	Total capital & operating costs In dollars/barrel		
	\$15.00	\$20.00	\$25.00
\$40	2,613	2,613	2,613
\$45	2,756	2,756	2,756
\$50	3,071	2,900	2,900
\$55	3,550	3,256	3,075
\$60	3,943	3,681	3,381
\$65	4,557	4,092	3,790
\$70	5,218	4,670	4,212
\$75	5,933	5,323	4,772
\$80	6,688	6,008	5,384
\$85	7,553	6,800	6,099
\$90	8,489	7,662	6,885
\$95	9,496	8,595	7,694
\$100	10,533	9,598	8,667

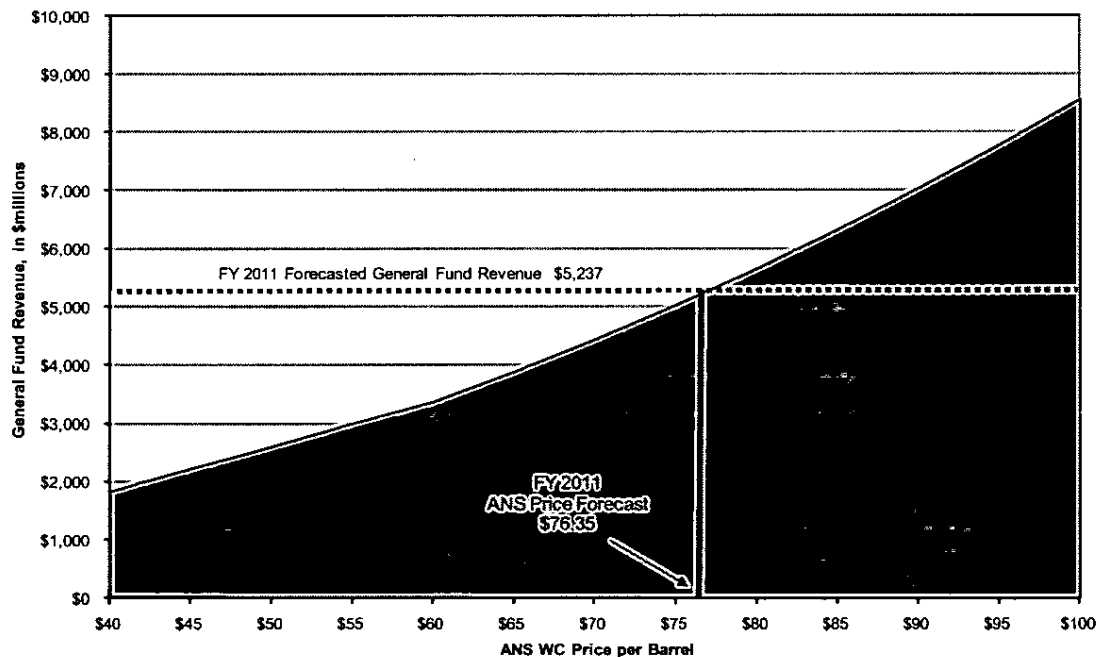
FY 2011			
At forecasted production of 0.623 mmbbls/day			
ANS \$/barrel	Total capital & operating costs In dollars/barrel		
	\$15.00	\$20.00	\$25.00
\$40	2,035	1,775	1,752
\$45	2,418	2,168	1,896
\$50	2,799	2,549	2,249
\$55	3,213	2,930	2,630
\$60	3,744	3,344	3,017
\$65	4,294	3,854	3,385
\$70	4,882	4,402	3,881
\$75	5,508	4,989	4,420
\$80	6,178	5,619	5,002
\$85	6,882	6,282	5,617
\$90	7,624	6,984	6,271
\$95	8,405	7,725	6,964
\$100	9,223	8,504	7,695

FY 2012			
At forecasted production of 0.617 mmbbls/day			
ANS \$/barrel	Total capital & operating costs In dollars/barrel		
	\$15.00	\$20.00	\$25.00
\$40	1,976	1,714	1,695
\$45	2,361	2,099	1,850
\$50	2,748	2,485	2,198
\$55	3,159	2,872	2,584
\$60	3,687	3,271	2,990
\$65	4,233	3,775	3,337
\$70	4,818	4,318	3,823
\$75	5,441	4,899	4,358
\$80	6,097	5,512	4,926
\$85	6,796	6,170	5,537
\$90	7,533	6,865	6,186
\$95	8,308	7,598	6,873
\$100	9,117	8,364	7,593

⁽¹⁾Fiscal year averages incorporate actual prices for the first four months of FY 2010.

*In addition to price and production, revenue estimates under ACES depend on levels of spending by petroleum producers and explorers. Spending plans may change as companies occasionally revise their investment strategies. The above estimates also do not consider how company investment decisions would change with a change in oil prices.

FY 2011 General Fund Unrestricted Revenue, with Price Sensitivity



Revenue. A-3

General Purpose Unrestricted Revenue—History⁽¹⁾

(\$ million)

FY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
TAX REVENUE										
Petroleum Property Tax	45.0	45.1	49.6	48.7	47.3	42.5	54.5	65.6	81.5	111.2
Excise Tax										
Alcoholic Beverages	12.7	12.0	12.9	14.1	16.4	17.3	17.6	17.1	20.0	19.5
Tobacco Products	16.3	16.3	15.5	16.3	16.0	25.1	35.4	43.8	44.9	46.6
Insurance Premium	28.7	32.2	34.1	39.0	43.7	45.9	44.3	46.5	47.1	45.5
Electric and Telephone Cooperative	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Motor Fuel Tax	41.9	37.5	40.2	37.2	41.2	39.4	42.0	39.2	41.8	10.1
Vehicle Rental tax	0.0	0.0	0.0	0.0	2.7	7.5	7.7	8.0	8.5	8.0
Tire Fee	0.0	0.0	0.0	0.0	0.8	1.6	1.6	1.5	1.5	1.5
Total	99.8	98.2	102.8	106.8	121.0	137.0	148.8	156.3	164.0	131.3
Income Tax										
General Corporate	56.3	59.5	53.4	47.7	39.6	61.8	138.0	176.9	182.7	120.9
Petroleum Corporate	162.7	338.1	178.4	151.1	298.8	524.0	661.1	594.4	605.8	492.2
Total	219.0	397.6	231.8	198.8	338.4	585.8	799.1	771.3	788.5	613.1
Severance Tax										
Oil and Gas Production	693.2	694.4	486.7	589.8	642.7	854.9	1,191.7	2,198.3	6810.9	3,100.9
Oil and Gas Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Gas Hazardous Release	9.5	9.4	9.6	9.2	9.2	8.3	7.8	10.1	11.7	11.1
Total	702.7	703.8	496.3	599.0	651.9	863.2	1,199.5	2,208.4	6,822.6	3,112.0
Fisheries Tax										
Fisheries Business Tax	18.2	15.4	12.7	13.8	14.9	10.7	15.4	17.1	14.7	19.3
Fishery Landing	2.2	4.1	2.6	6.9	2.5	3.9	4.7	5.3	7.9	4.7
Total	20.4	19.5	15.3	20.7	17.4	14.6	20.1	22.4	22.6	24.0
Other Tax										
Estate	2.5	2.7	3.1	1.2	2.3	1.5	0.6	0.1	0.0	0.2
Mining	3.4	1.7	0.5	0.4	3.2	10.3	18.6	79.1	54.4	15.5
Charitable Gaming	2.3	2.4	2.5	2.6	2.4	2.5	2.4	2.5	2.7	2.8
Total	8.2	6.8	6.1	4.2	7.9	14.3	21.6	81.7	57.1	18.5
TOTAL TAX REVENUE	1,095.1	1,271.0	901.9	978.2	1,183.9	1,657.4	2,243.6	3,305.7	7,936.3	4,010.1

(continued on next page)

General Purpose Unrestricted Revenue—History (continued from prior page)

(\$ million)

FY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
NON TAX REVENUE										
Licenses and Permits	68.4	37.3	42.2	33.6	41.8	42.7	41.0	42.0	38.9	35.5
Intergovernmental Receipts										
Federal Shared Revenues	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charges for Services	43.7	27.0	19.1	13.9	11.1	17.9	21.8	28.5	29.3	19.3
Fines and Forfeitures	46.2	33.6	6.6	7.0	16.0	9.4	8.5	7.8	8.9	10.5
Rents and Royalties										
Oil and Gas Royalties-Net	727.8	781.0	575.7	825.7	1,042.8	1,401.1	1,772.2	1,583.8	2,420.6	1,451.2
Oil and Gas Bonuses, Rents, Interest ⁽²⁾ (3)	4.1	18.3	20.1	14.6	13.3	18.8	11.9	29.2	25.5	14.4
Other ⁽⁴⁾	9.7	10.9	9.3	6.2	7.8	9.3	8.8	11.8	15.7	15.6
Total	741.6	810.2	605.1	846.5	1,063.9	1,429.2	1,792.9	1,624.8	2,460.7	1,481.2
Investment Earnings⁽³⁾	48.1	67.6	43.1	59.0	9.7	24.7	53.3	140.1	227.8	247.6
Miscellaneous Revenue	37.6	34.9	42.3	9.4	19.2	7.5	39.3	9.7	26.2	27.0
Sub-Total NON-TAX REVENUE	986.6	1,010.9	758.4	969.4	1,161.7	1,531.4	1,956.8	1,852.9	2,792.9	1,821.1
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL NON-TAX REVENUE	986.6	1,010.9	758.4	969.4	1,161.7	1,531.4	1,956.8	1,852.9	2,792.9	1,821.1
TOTAL TAX REVENUE	1,095.1	1,271.0	901.9	978.2	1,183.9	1,657.4	2,243.6	3,305.7	7,936.3	4,010.1
TOTAL GENERAL PURPOSE UNRESTRICTED REVENUE	2,081.7	2,281.9	1,660.3	1,947.6	2,345.6	3,188.8	4,200.4	5,158.6	10,728.2	5,831.2

(1) General Purpose Unrestricted Revenue includes those revenues that are not restricted by statute or custom, as reported elsewhere in this publication. A summary of historical General Purpose Unrestricted Revenue can be found on the Tax Division's web site at: www.tax.alaska.gov/sourcesbook/GeneralFund-UnrestrictedRevenueHistory.pdf

(2) These categories are primarily composed of petroleum.

(3) Starting in FY 2001, interest earnings are included in oil and gas royalties and excluded from investment earnings.

(4) Includes non-petroleum rents and royalties.

Revenue. A-4a

General Purpose Unrestricted Petroleum Revenue—History⁽¹⁾

(\$ million)

FY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Petroleum Corporate Income Tax	162.7	338.1	178.4	151.1	298.8	524.0	661.1	594.4	605.8	492.2
Production Tax	702.7	703.8	496.3	599.0	651.9	863.2	1,199.5	2,208.4	6,822.6	3,112.0
Petroleum Property Tax	45.0	45.1	49.6	48.7	47.3	42.5	54.5	65.6	81.5	111.2
Oil and Gas Royalties-Net ⁽²⁾	727.8	781.0	575.7	825.7	1,042.8	1,401.1	1,772.2	1,583.8	2,420.6	1,451.2
Bonuses, Rents & Interest-Net ⁽²⁾⁽³⁾	4.1	18.3	20.1	14.6	13.3	18.8	11.9	29.2	25.5	14.4
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Petroleum Revenue	1,642.3	1,886.3	1,320.1	1,639.1	2,054.1	2,849.6	3,699.2	4,481.4	9,956.0	5,181.0
Cumulative Unrestricted Petroleum Revenue⁽⁴⁾	47,724.5	49,610.8	50,930.9	52,570.0	54,624.1	57,473.7	61,172.9	65,654.3	75,610.3	80,791.3
Total General Purpose Unrestricted Revenue	2,081.7	2,281.9	1,660.3	1,947.6	2,345.6	3,188.8	4,200.4	5,148.5	10,728.2	5,831.2
% Petroleum of Total GP Unrestricted Revenue	79%	83%	80%	84%	88%	89%	88%	87%	93%	89%

⁽¹⁾ Historical General Purpose Unrestricted petroleum revenue can be found on the Tax Division's web site at: <http://www.tax.alaska.gov/sourcesbook/PetroleumRevenueHistory.pdf>. Table on Tax web site includes historical Reserve Tax (FY 1976-1977) and Petroleum Special Settlements (FY 1986-1995) which are reflected as current zero totals in Appendix A-4a.

⁽²⁾ Royalties, bonuses, rents and interest are net of Permanent Fund contribution and Constitutional Budget Reserve Fund (CBRF) deposits.

⁽³⁾ This category is primarily composed of petroleum revenue.

⁽⁴⁾ The cumulative unrestricted petroleum revenue total is based on revenue beginning in FY 1959.

Revenue. A-4b

General Purpose Unrestricted Petroleum Revenue—Forecast ⁽¹⁾

(\$ million)

FY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Petroleum Corporate Income Tax	470.0	580.0	600.0	615.0	635.0	645.0	655.0	665.0	670.0	695.0
Production Tax	2,126.1	2,430.9	2,631.5	2,966.8	3,323.2	3,362.8	3,131.5	3,066.5	3,043.9	3,013.7
Petroleum Property Tax	101.1	96.3	91.9	87.4	83.2	79.3	75.5	71.8	68.2	64.9
Oil and Gas Royalties-Net ⁽²⁾	1,447.0	1,521.3	1,632.8	1,643.2	1,664.9	1,668.3	1,653.4	1,657.9	1,600.4	1,531.4
Bonuses, Rents & Interest-Net ⁽²⁾⁽³⁾	23.3	19.1	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Petroleum Revenue	4,167.5	4,647.7	4,972.7	5,329.0	5,722.9	5,772.0	5,532.0	5,477.7	5,399.1	5,321.6
Cumulative Unrestricted Petroleum Revenue⁽⁴⁾	84,958.8	89,606.5	94,579.3	99,908.3	105,631.2	111,403.2	116,935.2	122,412.9	127,812.0	133,133.5
Total General Purpose Unrestricted Revenue	4,777.9	5,236.6	5,573.3	5,931.6	6,340.2	6,399.8	6,170.7	6,120.1	6,069.5	6,002.7
% Petroleum of Total GP Unrestricted Revenue	87%	89%	89%	90%	90%	90%	90%	90%	89%	89%

⁽¹⁾ Historical General Purpose Unrestricted petroleum revenue can be found on the Tax Division's web site at: <http://www.tax.alaska.gov/sourcesbook/PetroleumRevenueHistory.pdf>. Table on Tax web site includes historical Reserve Tax (FY 1976-1977) and Petroleum Special Settlements (FY 1986-1995) which are reflected as current zero totals in Appendix A-4a.

⁽²⁾ Royalties, bonuses, rents and interest are net of Permanent Fund contribution and Constitutional Budget Reserve Fund (CBRF) deposits.

⁽³⁾ This category is primarily composed of petroleum revenue.

⁽⁴⁾ The cumulative unrestricted petroleum revenue total is based on revenue beginning in FY 1959.

Revenue. A-5a

Total Alaska Government Petroleum Revenue—History

(\$ million)

FY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Unrestricted Petroleum Revenue										
Petroleum Corporate Income Tax	162.7	338.1	178.4	151.1	298.8	524.0	661.1	594.4	605.8	492.2
Oil and Gas Production Tax	693.2	694.4	486.7	589.8	642.7	854.9	1,191.7	2,198.3	6,810.9	3,100.9
Oil and Gas Hazardous Release	9.5	9.4	9.6	9.2	9.2	8.3	7.8	10.1	11.7	11.1
Oil and Gas Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petroleum Property Tax	45.0	45.1	49.6	48.7	47.3	42.5	54.5	65.6	81.5	111.2
Oil & Gas Royalties	727.8	781.0	575.7	825.7	1,042.8	1,401.1	1,772.2	1,583.8	2,420.6	1,451.2
Bonuses, Rents & Interest	4.1	18.3	20.1	14.6	13.3	18.8	11.9	29.2	25.5	14.4
Total Unrestricted Petroleum Revenue	1,642.3	1,886.3	1,320.1	1,639.1	2,054.1	2,849.6	3,699.2	4,481.4	9,956.0	5,181.0
Restricted Petroleum Revenue										
NPR-A Rents, Royalties, Bonuses	40.3	1.7	1.7	34.6	2.5	31.6	4.5	12.8	5.2	14.8
Royalties to Permanent Fund	301.1	339.3	257.7	397.6	354.7	476.9	599.5	535.0	834.0	659.8
Royalties to Public School Fund	5.4	5.6	4.3	6.2	7.1	9.6	12.0	10.6	16.5	11.0
CBRF Deposits ⁽¹⁾	448.3	49.1	90.2	22.3	8.4	27.4	43.7	101.9	476.4	202.6
Total Restricted Petroleum Revenue	795.1	395.7	353.9	460.7	372.7	545.5	659.7	660.3	1,332.1	888.2
Total Petroleum Revenue	2,437.4	2,282.0	1,674.0	2,099.8	2,426.8	3,395.1	4,358.9	5,141.7	11,288.1	6,069.2

⁽¹⁾ Oil and Gas Settlements from DOR Mineral Payments Fund Allocation Detail.

Revenue. A-5b

Total Alaska Government Petroleum Revenue—Forecast⁽¹⁾

(\$ million)

FY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Unrestricted Petroleum Revenue										
Petroleum Corporate Income Tax	470.0	580.0	600.0	615.0	635.0	645.0	655.0	665.0	670.0	695.0
Oil and Gas Production Tax	2,115.6	2,421.0	2,621.6	2,956.7	3,312.9	3,352.8	3,121.7	3,057.0	3,034.9	3,005.3
Oil and Gas Hazardous Release	10.5	9.9	9.9	10.1	10.2	10.1	9.7	9.5	9.0	8.5
Oil and Gas Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petroleum Property Tax	101.1	96.3	91.9	87.4	83.2	79.3	75.5	71.8	68.2	64.9
Oil & Gas Royalties	1,447.0	1,521.3	1,632.8	1,643.2	1,664.9	1,668.3	1,653.4	1,657.9	1,600.4	1,531.4
Bonuses, Rents & Interest	23.3	19.1	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
Total Unrestricted Petroleum Revenue	4,167.5	4,647.7	4,972.7	5,329.0	5,722.9	5,772.0	5,532.0	5,477.7	5,399.1	5,321.6
Restricted Petroleum Revenue										
NPR-A Rents, Royalties, Bonuses	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Royalties to Permanent Fund	601.3	672.3	720.4	731.7	748.5	745.5	745.1	738.2	715.5	680.2
Royalties to Public School Fund	10.4	11.1	11.9	12.0	12.2	12.2	12.1	12.1	11.7	11.2
CBRF Deposits ⁽¹⁾	440.7	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Total Restricted Petroleum Revenue	1,057.3	708.3	757.1	768.6	785.6	782.5	782.1	775.2	752.1	716.2
Total Petroleum Revenue	5,224.8	5,356.0	5,729.9	6,097.6	6,508.6	6,554.5	6,314.1	6,252.9	6,151.2	6,037.8

⁽¹⁾ Oil and Gas Settlements from DOR Mineral Payments Fund Allocation Detail.

Prices. B-1a**Crude Oil and Natural Gas Prices—History⁽¹⁾⁽²⁾****NOMINAL⁽³⁾****WTI, ANS West Coast, ANS and Cook Inlet Wellhead Prices**

(\$ per barrel)

FY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
WTI	25.99	30.05	23.70	29.90	33.73	48.72	64.22	63.35	97.02	69.71
ANS West Coast Spot	24.42	27.54	21.65	28.59	32.36	44.85	62.12	61.60	96.51	68.34
ANS Wellhead Wtd Average All Destinations	19.87	22.56	17.04	23.42	27.46	40.12	56.69	56.20	90.46	61.86
Cook Inlet Wellhead	22.14	25.64	19.37	25.32	28.41	41.72	58.26	57.31	82.26	62.51

Henry Hub Natural Gas Prices

(\$ per million Btu)

FY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Henry Hub	2.81	5.43	2.76	4.84	5.41	6.26	9.12	6.88	8.30	5.92

REAL 2009 \$⁽⁴⁾**WTI, ANS West Coast, ANS and Cook Inlet Wellhead Prices**

(\$ per barrel)

FY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
WTI	34.21	38.14	29.13	36.37	40.18	56.20	72.25	68.32	102.16	69.71
ANS West Coast Spot	32.14	34.95	26.61	34.77	38.54	51.73	69.89	66.43	101.62	68.34
ANS Wellhead Wtd Average All Destinations	26.16	28.63	20.95	28.49	32.71	46.28	63.78	60.61	95.25	61.86
Cook Inlet Wellhead	29.15	32.55	23.81	30.79	33.84	48.13	65.54	61.80	86.62	62.51

Henry Hub Natural Gas Prices

(\$ per million Btu)

FY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Henry Hub	3.70	6.89	3.39	5.88	6.44	7.22	10.26	7.41	8.74	5.92

Prices. B-1b

Crude Oil Prices—Forecast

NOMINAL⁽³⁾

WTI, ANS West Coast, ANS and Cook Inlet Wellhead Prices (\$ per barrel)

FY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
WTI	68.71	78.85	86.43	88.74	91.11	93.55	96.05	98.63	101.27	103.99
ANS West Coast Spot	66.93	76.35	83.93	86.24	88.61	91.05	93.55	96.13	98.77	101.49
ANS Wellhead Wtd Average All Destinations	61.03	70.36	77.78	80.02	82.27	84.57	86.89	89.22	91.54	93.84
Cook Inlet Wellhead	65.04	74.48	82.08	84.40	86.79	89.24	91.75	94.34	96.99	99.72

REAL 2009 \$

WTI, ANS West Coast, ANS and Cook Inlet Wellhead Prices (\$ per barrel)

FY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
WTI	66.87	74.69	79.68	79.62	79.56	79.50	79.44	79.39	79.33	79.28
ANS West Coast Spot	65.14	72.32	77.37	77.37	77.37	77.37	77.37	77.37	77.37	77.37
ANS Wellhead Wtd Average All Destinations	59.39	66.65	71.71	71.79	71.83	71.87	71.86	71.82	71.71	71.54
Cook Inlet Wellhead	63.30	70.55	75.66	75.72	75.78	75.83	75.88	75.93	75.98	76.02

⁽¹⁾ In FY 2008, the Department of Revenue made a change in the method by which it accounts for future revenues, as well as historical and future production and oil prices, from a cash basis to an accrual basis. This method change will better align fiscal year revenues with the state's financial reports and other publications. As a result, slight modifications have been made to historical production values and oil prices to accommodate this change.

⁽²⁾ Data from Platt's Oilgram Price Report, Wood McKenzie and Alaska Department of Revenue's prevailing value and tax return data. Historical real and nominal crude oil and natural gas prices can be found on the Tax Division's web site at: www.tax.alaska.gov/sourcesbook/OilGasPrices.pdf.

⁽³⁾ Adjustment to "nominal" dollars is required to prepare the crude oil and natural gas price forecasts. Callan Associates Inc.'s inflation rate of 2.75% was used for FY 2011 and beyond.

⁽⁴⁾ Adjustment to "real 2010" dollars is useful to compare prices across time excluding inflation. These prices data are adjusted to real 2010 dollars based on inflation rates provided by the U.S. Department of Labor, Bureau of Labor Statistics. The data series used is the Consumer Price Index for all Urban Consumers (CPI-U) which can be found at: www.bls.gov/cpi/home.htm.

Prices. B-2a

Nominal Netback Costs—History⁽¹⁾⁽²⁾

Marine Costs, TAPS Tariff, and Other Adjustment Charges

(\$ per barrel)

FY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
ANS West Coast	24.42	27.54	21.65	28.59	32.36	44.85	62.12	61.60	96.51	68.34
Marine Costs	1.56	1.40	1.58	1.70	1.69	1.79	1.65	1.63	1.93	2.05
TAPS Tariff	2.90	3.30	3.50	3.37	3.16	3.33	3.55	4.51	5.08	4.59
Other Deductions and Adjustments ⁽²⁾	0.08	0.29	(0.48)	0.09	0.05	(0.40)	0.23	(0.74)	(0.96)	(0.15)
ANS Wellhead Value	19.87	22.56	17.04	23.42	27.46	40.12	56.69	56.20	90.46	61.86

⁽¹⁾ In FY 2008, the Department of Revenue made a change in the method by which it accounts for future revenues, as well as historical and future production and oil prices, from a cash basis to an accrual basis. This method change will better align fiscal year revenues with the state's financial reports and other publications. As a result, slight modifications have been made to historical production values and oil prices to accommodate this change.

⁽²⁾ Historical netback costs can be found on the Tax Division web site: www.tax.alaska.gov/sourcesbook/NetbackCosts.pdf.

Prices. B-2b

Nominal Netback Costs—Forecast ⁽¹⁾

Marine Costs, TAPS Tariff, and Other Adjustment Charges

(\$ per barrel)

FY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
ANS West Coast	66.93	76.35	83.93	86.24	88.61	91.05	93.55	96.13	98.77	101.49
Marine Costs	2.07	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45
TAPS Tariff	4.18	4.40	4.51	4.50	4.51	4.60	4.75	4.95	5.23	5.62
Other Deductions and Adjustments ⁽²⁾	(0.35)	(0.46)	(0.45)	(0.42)	(0.36)	(0.37)	(0.38)	(0.39)	(0.40)	(0.41)
ANS Wellhead Value	61.03	70.36	77.78	80.02	82.27	84.57	86.89	89.22	91.54	93.84

⁽¹⁾ Data from the Department of Revenue's Forecast Model.

Prices. B-3**Price Changes from Spring 2008 Forecast
(nominal \$ per barrel)**

FY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fall 2009 Forecast										
WTI	68.71	78.85	86.43	88.74	91.11	93.55	96.05	98.63	101.27	103.99
ANS West Coast	66.93	76.35	83.93	86.24	88.61	91.05	93.55	96.13	98.77	101.49
ANS Wellhead Wtd Average All Destinations	61.03	70.36	77.78	80.02	82.27	84.57	86.89	89.22	91.54	93.84
Cook Inlet Wellhead	65.04	74.48	82.08	84.40	86.79	89.24	91.75	94.34	96.99	99.72
Spring 2009 Forecast										
WTI	60.79	70.17	78.44	82.45	86.00	88.43	91.90	94.70	97.54	100.58
ANS West Coast	58.29	67.68	75.94	79.95	83.50	85.93	89.40	92.20	95.04	98.08
ANS Wellhead Wtd Average All Destinations	52.70	62.00	70.09	74.01	77.45	79.76	83.09	85.66	88.40	91.29
Cook Inlet Wellhead	56.34	65.73	74.01	78.02	81.58	84.02	87.49	90.26	93.09	96.15
\$ change from prior forecast										
WTI	7.92	8.68	7.99	6.29	5.11	5.12	4.15	3.93	3.73	3.41
ANS West Coast	8.64	8.67	7.99	6.29	5.11	5.12	4.15	3.93	3.73	3.41
ANS Wellhead Wtd Average All Destinations	8.32	8.36	7.70	6.01	4.82	4.81	3.80	3.56	3.14	2.55
Cook Inlet Wellhead	8.70	8.76	8.07	6.38	5.21	5.22	4.27	4.08	3.90	3.57
% change from prior forecast										
WTI	13.0%	12.4%	10.2%	7.6%	5.9%	5.8%	4.5%	4.1%	3.8%	3.4%
ANS West Coast	14.8%	12.8%	10.5%	7.9%	6.1%	6.0%	4.6%	4.3%	3.9%	3.5%
ANS Wellhead Wtd Average All Destinations	15.8%	13.5%	11.0%	8.1%	6.2%	6.0%	4.6%	4.2%	3.6%	2.8%
Cook Inlet Wellhead	15.4%	13.3%	10.9%	8.2%	6.4%	6.2%	4.9%	4.5%	4.2%	3.7%

Production. C-1

Production Differences from Spring 2008 Forecast

(million barrels per day)

FY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fall 2009 Forecast										
ANS	0.659	0.623	0.617	0.624	0.635	0.623	0.604	0.588	0.561	0.524
Cook Inlet	0.009	0.008	0.007	0.006	0.006	0.005	0.005	0.004	0.004	0.004
ALASKA	0.668	0.631	0.623	0.630	0.640	0.628	0.609	0.593	0.564	0.527
Spring 2009 Forecast										
ANS	0.655	0.634	0.637	0.637	0.652	0.635	0.616	0.598	0.575	0.622
Cook Inlet	0.012	0.011	0.010	0.009	0.009	0.008	0.008	0.007	0.007	0.006
ALASKA	0.666	0.645	0.647	0.646	0.660	0.643	0.624	0.605	0.581	0.628
Volume change from prior forecast										
ANS	0.004	(0.011)	(0.021)	(0.013)	(0.017)	(0.011)	(0.012)	(0.010)	(0.014)	(0.099)
Cook Inlet	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
ALASKA	0.001	(0.014)	(0.024)	(0.016)	(0.020)	(0.014)	(0.015)	(0.013)	(0.017)	(0.101)
Percent change from prior forecast										
ANS	0.6%	(1.7%)	(3.3%)	(2.0%)	(2.6%)	(1.8%)	(1.9%)	(1.7%)	(2.5%)	(15.9%)
Cook Inlet	(24.4%)	(27.8%)	(30.6%)	(33.1%)	(35.4%)	(37.5%)	(39.3%)	(39.6%)	(41.3%)	(42.8%)
ALASKA	0.2%	(2.2%)	(3.7%)	(2.5%)	(3.0%)	(2.2%)	(2.4%)	(2.1%)	(2.9%)	(16.1%)

Production. C-2a

Crude Oil Production—History⁽¹⁾⁽²⁾

(million barrels per day)

FY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Prudhoe Bay ⁽³⁾	0.571	0.536	0.486	0.429	0.414	0.380	0.335	0.271	0.291	0.290
PBU Satellites ⁽⁴⁾	0.005	0.007	0.030	0.045	0.052	0.043	0.041	0.043	0.034	0.037
GPMA ⁽⁵⁾	0.113	0.088	0.073	0.065	0.060	0.055	0.048	0.037	0.044	0.038
Kuparuk	0.211	0.197	0.174	0.160	0.154	0.141	0.133	0.121	0.113	0.106
Kuparuk Satellites ⁽⁶⁾	0.036	0.031	0.041	0.052	0.049	0.051	0.043	0.044	0.038	0.036
Milne Point ⁽⁷⁾	0.053	0.052	0.052	0.051	0.051	0.049	0.041	0.033	0.033	0.031
Endicott ⁽⁸⁾	0.043	0.037	0.033	0.029	0.028	0.020	0.021	0.016	0.014	0.014
Liberty										
Alpine ⁽⁹⁾		0.045	0.096	0.099	0.099	0.105	0.123	0.103	0.079	0.063
Fiord ⁽¹⁰⁾	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.018	0.021
Nanuq ⁽¹¹⁾	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.019	0.022
NPR-A										
Offshore ⁽¹²⁾									0.000	0.004
Northstar ⁽¹³⁾			0.025	0.059	0.066	0.068	0.055	0.045	0.034	0.027
Total ANS	1.033	0.993	1.010	0.991	0.974	0.911	0.840	0.734	0.716	0.692
Cook Inlet	0.029	0.029	0.033	0.030	0.025	0.020	0.018	0.015	0.014	0.010
Total Alaska	1.062	1.021	1.043	1.021	0.999	0.932	0.858	0.750	0.730	0.702

⁽¹⁾ In FY 2008, the Department of Revenue made a change in the method by which it accounts for future revenues, as well as historical and future production and oil prices, from a cash basis to an accrual basis. This method change will better align fiscal year revenues with the state's financial reports and other publications. As a result, slight modifications have been made to historical production values and oil prices to accommodate this change.

⁽²⁾ A summary of historical crude oil production can be found on the Tax Division's web site at: www.tax.alaska.gov/sourcesbook/AlaskaProduction.pdf.

⁽³⁾ Includes NGLs from Central Gas Facility shipped to TAPS.

⁽⁴⁾ Aurora, Borealis, Midnight Sun, Orion and Polaris.

⁽⁵⁾ Lisburne, Niakuk, North Prudhoe Bay State, Point McIntyre, Raven, West Beach and West Niakuk.

⁽⁶⁾ Meltwater, Tabasco, Tam and West Sak.

⁽⁷⁾ Includes Sag River and Schrader Bluff.

⁽⁸⁾ Includes Badami, Eider and Sag Delta.

⁽⁹⁾ Includes Alpine-West and Qannik.

⁽¹⁰⁾ Fiord, Fiord-Kuparuk.

⁽¹¹⁾ Nanuq and Nanuq-Kuparuk.

⁽¹²⁾ Known Offshore includes Nikaitchuq and Oooguruk.

⁽¹³⁾ Includes Outer Continental Shelf (OCS) production.

Production. C-2b

Crude Oil Production—Forecast ⁽¹⁾

(million barrels per day)

FY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Prudhoe Bay ⁽²⁾	0.280	0.261	0.249	0.237	0.238	0.231	0.222	0.214	0.205	0.198
PBU Satellites ⁽³⁾	0.035	0.036	0.043	0.043	0.042	0.040	0.037	0.035	0.031	0.028
GPMA ⁽⁴⁾	0.036	0.032	0.029	0.026	0.023	0.021	0.020	0.018	0.017	0.015
Kuparuk	0.099	0.091	0.090	0.085	0.081	0.077	0.073	0.069	0.065	0.062
Kuparuk Satellites ⁽⁵⁾	0.037	0.035	0.031	0.028	0.026	0.029	0.027	0.031	0.029	0.027
Milne Point ⁽⁶⁾	0.029	0.029	0.029	0.029	0.029	0.028	0.027	0.025	0.024	0.022
Endicott ⁽⁷⁾	0.014	0.012	0.011	0.013	0.015	0.017	0.018	0.016	0.015	0.013
Liberty	0.000	0.000	0.009	0.024	0.034	0.032	0.026	0.021	0.018	0.015
Alpine ⁽⁸⁾	0.057	0.056	0.054	0.053	0.053	0.046	0.041	0.036	0.032	0.029
Fiord ⁽⁹⁾	0.029	0.029	0.025	0.022	0.019	0.018	0.023	0.028	0.027	0.022
Nanuq ⁽¹⁰⁾	0.013	0.009	0.007	0.008	0.008	0.007	0.006	0.005	0.005	0.004
NPR-A	0.000	0.000	0.001	0.009	0.015	0.015	0.021	0.024	0.029	0.029
Offshore ⁽¹¹⁾	0.008	0.016	0.026	0.034	0.040	0.043	0.046	0.049	0.049	0.044
Point Thomson	0.000	0.000	0.000	0.000	0.002	0.010	0.010	0.010	0.010	0.010
Northstar ⁽¹²⁾	0.020	0.016	0.013	0.011	0.010	0.009	0.008	0.007	0.006	0.006
Total ANS	0.659	0.623	0.617	0.624	0.635	0.623	0.604	0.588	0.561	0.524
Cook Inlet	0.009	0.008	0.007	0.006	0.006	0.005	0.005	0.004	0.004	0.004
Total Alaska	0.668	0.631	0.623	0.630	0.640	0.628	0.609	0.593	0.564	0.527

⁽¹⁾ In FY 2008, the Department of Revenue made a change in the method by which it accounts for future revenues, as well as historical and future production and oil prices, from a cash basis to an accrual basis. This method change will better align fiscal year revenues with the state's financial reports and other publications. As a result, slight modifications have been made to historical production values and oil prices to accommodate this change.

⁽²⁾ Includes NGLs from Central Gas Facility shipped to TAPS.

⁽³⁾ Aurora, Borealis, Midnight Sun, Orion and Polaris.

⁽⁴⁾ Lisburne, Niakuk, Point McIntyre, Raven, West Beach.

⁽⁵⁾ Meltwater, Tabasco, Tam and West Sak.

⁽⁶⁾ Includes Sag River and Schrader Bluff.

⁽⁷⁾ Includes Sag Delta.

⁽⁸⁾ Includes Alpine-West and Qannik.

⁽⁹⁾ Fiord, Fiord-Kuparuk and Fiord West.

⁽¹⁰⁾ Nanuq and Nanuq-Kuparuk.

⁽¹¹⁾ Known Offshore includes Nikaitchuq and Oooguruk.

⁽¹²⁾ Includes Outer Continental Shelf (OCS) production.

Production. C-3a

Economic Limit Factors (for Fields with Positive ELF)—History⁽¹⁾⁽²⁾

(percent)

FY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Prudhoe Bay	0.931	0.915	0.895	0.868	0.850	0.847	0.856	0.789	0.809	0.797
Aurora						0.367	0.856	0.789	0.809	0.797
Borealis			0.098	0.107	0.076	0.369	0.856	0.789	0.809	0.797
Midnight Sun			0.018	0.001	0.000	0.367	0.856	0.789	0.809	0.797
Orion						0.368	0.856	0.789	0.809	0.797
Polaris						0.367	0.856	0.789	0.809	0.797
Point McIntyre	0.618	0.415	0.192	0.162	0.098	0.383	0.856	0.789	0.809	0.797
Kuparuk	0.589	0.487	0.336	0.234	0.165	0.044	0.004	0.000	0.000	0.000
Tarn	0.041	0.003	0.050	0.102	0.051	0.008	0.001	0.000	0.000	0.000
Milne Point	0.025	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Endicott	0.046	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Alpine		0.491	0.878	0.858	0.842	0.817	0.856	0.781	0.603	0.377
Fiord								0.007	0.023	0.054
Fiord-Kuparuk								0.011	0.000	0.005
Nanuq-Kuparuk								0.207	0.326	0.332
Northstar			0.495	0.861	0.847	0.824	0.722	0.521	0.266	0.020
Volume Weighted ELF	0.700	0.650	0.608	0.580	0.553	0.563	0.606	0.512	0.499	0.465

⁽¹⁾ In FY 2008, the Department of Revenue made a change in the method by which it accounts for future revenues, as well as historical and future production and oil prices, from a cash basis to an accrual basis. This method change will better align fiscal year revenues with the state's financial reports and other publications. As a result, slight modifications have been made to historical production values and oil prices to accommodate this change.

⁽²⁾ A summary of historical ELFs can be found on the Tax Division's web site at www.tax.alaska.gov/sourcesbook/ELFs.pdf.

Under the ELF production tax system, the tax rate for oil depended on the age of the field and the Economic Limit Factor (ELF). The ELF was calculated based on total daily oil production and average daily per well production from each producing field. The statutory production tax rate on oil was 12.25% of its value at the point of production for the first five years of field production and 15% thereafter. There was a minimum tax of 80 cents per taxable barrel. The effective tax rate was calculated by multiplying the statutory tax rate, even if it was the minimum 80 cents per barrel, times the ELF. The ELF formula resulted in lower effective tax rates for smaller, low-production fields and higher tax rates for larger, highly productive fields. There was a unique combination of total daily field production and average daily per well production.

In January 2005, the department aggregated seven fields in the Prudhoe Bay Unit. The decision to aggregate focused on, among other things, the increasing interdependence found in the engineering and operation of the fields.



Revenue Sources Book

Alaska Department of Revenue – Tax Division

FALL 2009

Production. C-3b

Economic Limit Factors (for Fields with Positive ELF)—Forecast ⁽¹⁾

(percent)

FY	2010	2011
Prudhoe Bay	0.772	0.715
Aurora	0.772	0.715
Borealis	0.772	0.715
Midnight Sun	0.772	0.715
Orion	0.772	0.715
Polaris	0.772	0.715
Point McIntyre	0.772	0.715
Kuparuk	0.000	0.000
Tam	0.000	0.000
Milne Point	0.000	0.000
Endicott	0.000	0.000
Alpine	0.332	0.227
Fiord	0.089	0.026
Fiord-Kuparuk	0.003	0.000
Nanuq-Kuparuk	0.031	0.000
Northstar	0.008	0.000
Volume Weighted ELF	0.339	0.368

⁽¹⁾ ELF is projected through FY 2011 to assist in the comparison of ACES revenues and revenue under the old ELF-based system. This comparison is required under the new statute.

Revenue Sources Book

Alaska Department of Revenue – Tax Division

FALL 2009

Forecast & Historical Data

Sean Parnell, Governor

Patrick Galvin, Commissioner

Jonathan Iversen, Director

Dona Keppers, Audit Master

www.tax.alaska.gov

Revenue Sources Book

Alaska Department of Revenue – Tax Division

FALL 2009

In accordance with AS 37.07.060 (b)(4), the Revenue Sources Book is compiled biannually by the Alaska Department of Revenue to assist the governor in formulating a proposed comprehensive financial plan for presentation to the Alaska State Legislature. Within the publication are shown prior year actuals, revised current year estimates and future year projections.

Anticipated state income is projected through the use of a number of data sources:

- (1) Econometric models developed by the Department of Revenue to forecast unrestricted non-petroleum revenues;
- (2) A petroleum revenue model created by the department's Tax Division;
- (3) Estimates from individual state agencies.

We thank the various state agencies for their cooperation in computing anticipated revenues for publication in this Fall 2009 Revenue Sources Book.

The Department of Revenue complies with Title II of the Americans With Disabilities Act of 1990. This publication is available in alternative communication formats upon request. Please contact the division's representative at 907-465-3692 or 907-465-3678 (TDD) to make necessary arrangements.

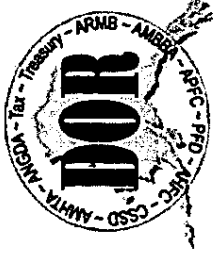
This publication, required by law (AS 37.07.060), was printed in Juneau, Alaska at a cost of about \$13 per copy.



*Presentation to the
Senate Finance Committee
January 26, 2010
Alaska Department of Revenue*



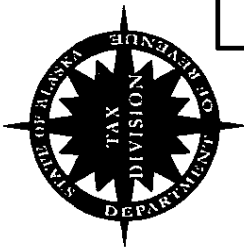
Outline for Presentation



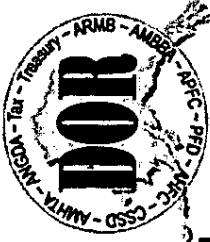
- **Fall 2009 Revenue Forecast for FY2010 and 2011**
 - Total Revenue
 - Unrestricted Revenue
 - Non-Oil Revenue
- **10-Year Revenue and Spending Projection**
- **How Production Tax Is Calculated**
 - FY 2009 Production tax Calculated
 - Impact of Oil Price Volatility
 - FY 2010 & 2011 Production Tax Projected
- **Components of Production Tax Forecast**
 - Oil Production Forecast
 - Oil Price Forecast
 - Lease Expenditures Forecast / Oil Company Spending



Fall 2009 Revenue Forecast FY2010 and FY2011



FY 10 and FY 11 Total Revenue

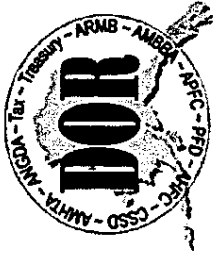


Revenue Type	FY10 (\$M)	FY11 (\$M)
Unrestricted Revenue		
Oil Revenue	\$ 4,167.5	\$ 4,647.7
Other Revenue (except Federal & Investment)	\$ 389.3	\$ 405.8
Investment Earnings	\$ 221.1	\$ 183.2
Subtotal Unrestricted	\$ 4,777.9	\$ 5,236.7
Restricted Revenue		
Oil Revenue	\$ 1,057.3	\$ 708.3
Other Revenue (except Federal & Investment)	\$ 588.9	\$ 589.6
Investment Earnings	\$ 3,307.3	\$ 3,252.8
Federal Revenue	\$ 2,916.7	\$ 2,916.7
Subtotal Restricted	\$ 7,870.2	\$ 7,467.4
Total Revenue	\$ 12,648.1	\$ 12,704.1

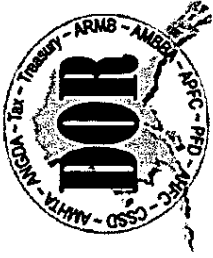
Source: Fall 2009 Revenue Sources Book



FY 10 & FY 11 General Fund Unrestricted Revenue



Revenue Type	FY 10 (\$M)	% Total	FY 11 (\$M)	% Total
Royalty - Net PF / SF	\$ 1,470.3	30.8%	\$ 1,540.4	29.4%
Production Tax	\$ 2,126.1	44.5%	\$ 2,430.9	46.4%
Corp Income Tax	\$ 470.0	9.8%	\$ 580.0	11.1%
Property Tax	\$ <u>101.1</u>	<u>2.1%</u>	\$ <u>96.3</u>	<u>1.8%</u>
Subtotal Oil Revenue	\$ 4,167.5	87.2%	\$ 4,647.7	88.8%
Non-Oil Revenue	\$ <u>610.4</u>	<u>12.8%</u>	\$ <u>589.0</u>	<u>11.2%</u>
Total Revenue	\$ 4,777.9	100.0%	\$ 5,236.6	100.0%

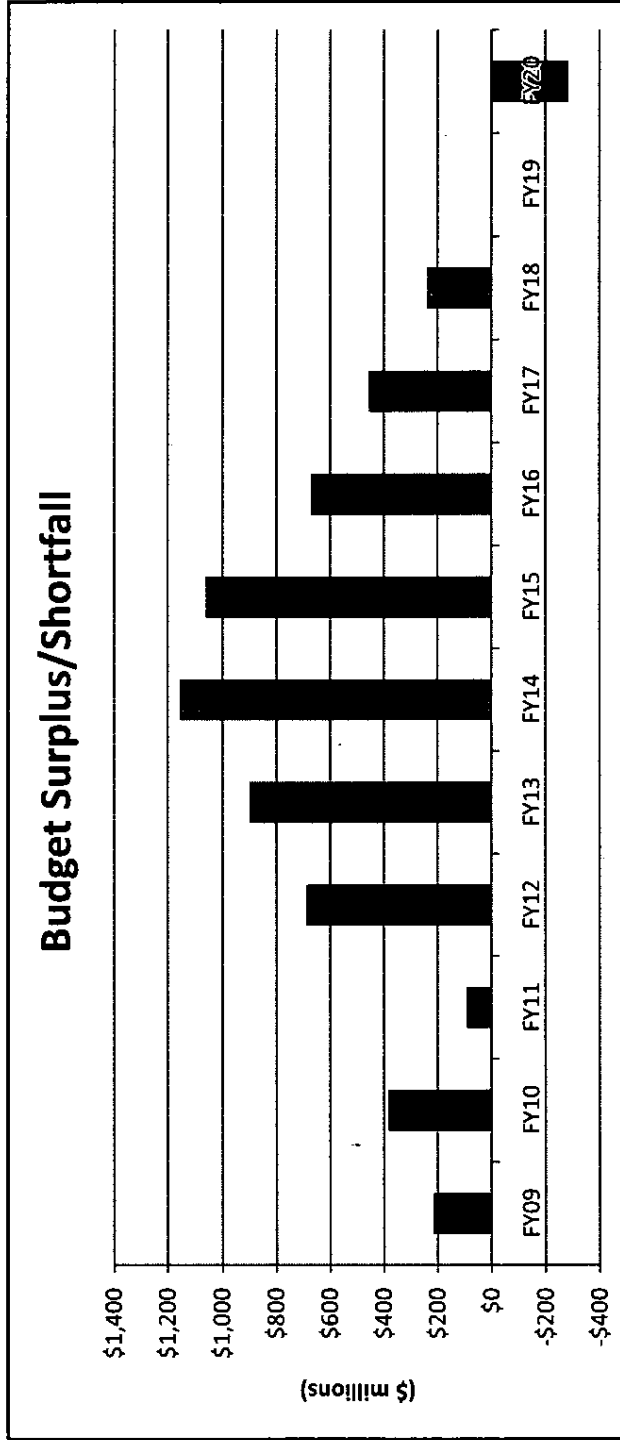
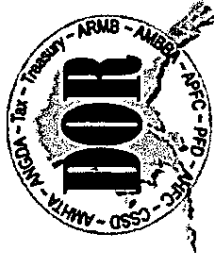


10-Year Revenue/Spending Projection



10-Year Revenue and Spending

Assumes Fall 2009 Revenue and 3% budget escalation from FY11



	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Revenue vs. Spending (\$Millions)												
General Fund Unrestricted Revenue	6,874.9	4,800.0	5,236.6	5,573.3	5,931.6	6,340.2	6,399.8	6,170.7	6,120.1	6,069.5	6,002.7	5,904.9
General Fund Expenses	6,659.0	4,415.2	4,742.6	4,884.9	5,031.4	5,182.4	5,337.8	5,498.0	5,662.9	5,832.8	6,007.8	6,188.0
Budget Surplus/Shortfall	215.9	384.8	94.0	688.4	900.2	1,157.8	1,062.0	672.7	457.2	236.7	(5.1)	(283.1)
Reserve Balances												
CBRF Total	7,114.4	9,070.0	9,750.0	11,082.0	12,704.0	14,674.0	16,649.0	18,330.0	19,884.0	21,301.0	22,561.0	23,903.0
Statutory Budget Reserve Balance	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	995.0	712.0
Total Reserve Balances	8,114.4	10,070.0	10,750.0	12,082.0	13,704.0	15,674.0	17,649.0	19,330.0	20,884.0	22,301.0	23,556.0	24,615.0

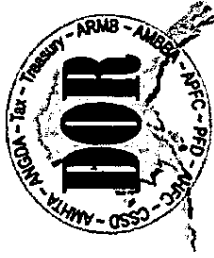
Source: OMB

- FY09 represents actuals rather than forecast.

- FY10 surplus/shortfall calculation adds \$22.1 in reappropriations and carry over to total available revenue.

- FY11 surplus calculation subtracts \$400 from surplus for Governor's Performance Scholarship Fund and \$13.1 deposit to Public Education Fund for FY12. CBR balance assumes that all available surplus is deposited to CBR main fund.

Appropriations projections do not represent a commitment by the Administration to propose spending at a particular level in FY11 or any future year. The 10 year forecast shows that unanticipated shortfalls during the period could be filled primarily through the use of reserve funds. However, other options could be used in whole, or in part. The plan will be revisited as conditions warrant.



How Production Tax Is Calculated



FY 09 Production Tax Calculated

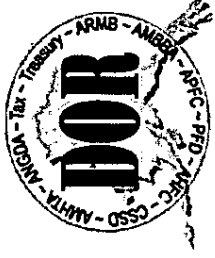


Avg ANS Oil Price (\$/bbl) & Daily Production (bbls)	Per Barrel	Barrels	Value
	\$68.34	692,127	\$47,299,959
Annual Production (bbl)			
Total Annual Production/Value	\$68.34	252,626,355	\$17,264,485,101
Royalty and Federal barrels		(34,187,360)	(\$2,336,364,182)
Taxable barrels		218,438,995	\$14,928,120,918
Downstream (Transportation) Costs (\$/bbl)			
ANS Marine Transportation	(\$2.05)		
TAPS Tariff	(\$4.59)		
Other	\$0.16		
Total Transportation Costs	(\$6.48)	218,438,995	(\$1,415,484,688)
Lease Expenditures			
Deductible Operating Expenditures	(\$9.39)		(\$2,050,000,000)
Deductible Capital Expenditures	(\$8.01)		(\$1,750,000,000)
Total Lease Expenditures	(\$17.40)	218,438,995	(\$3,800,000,000)
Production Tax Value (PTV)	\$44.46	218,438,995	\$9,712,636,231
Production Tax			
Base Tax (25%*PTV)			\$2,428,159,058
Progressive Tax Rate = (\$44.46-\$30) * 0.4% = 5.8%			
Progressive Tax = (5.8% * PTV)			\$561,928,014
Total Tax Due before credits			\$2,990,087,072
Credits Applied Against Taxes			(\$350,000,000)
Total Tax after credits			\$2,640,087,072

Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts



\$2.6 Billion??



But Didn't We Collected

\$3.1 billion in

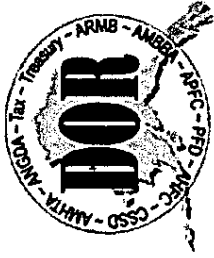
Production Tax in FY09



Why the difference?



FY 09 Monthly Tax Calculations – Monthly Oil Price Volatility Matters!



	July	August	September	October	November	December	Total
Oil Price	\$132.87	\$115.98	\$101.86	\$73.65	\$53.94	\$37.70	
Total barrels per month	20,174,640	17,230,458	21,197,405	23,080,737	22,846,738	22,727,030	
Royalty & Federal barrels	2,848,947	2,848,947	2,848,947	2,848,947	2,848,947	2,848,947	
Taxable barrels per month	17,325,693	14,381,511	18,348,458	20,231,790	19,997,791	19,878,083	
Wellhead value	\$126.37	\$109.48	\$95.36	\$67.15	\$47.44	\$31.20	
Gross value of taxable bibls	\$2,189,447,867	\$1,574,487,850	\$1,749,708,987	\$1,358,564,721	\$948,695,216	\$620,196,200	
Deductible Opex	\$170,833,333	\$170,833,333	\$170,833,333	\$170,833,333	\$170,833,333	\$170,833,333	
Deductible Capex	\$145,833,333	\$145,833,333	\$145,833,333	\$145,833,333	\$145,833,333	\$145,833,333	
Taxable value	\$1,872,781,200	\$1,257,821,183	\$1,433,042,320	\$1,041,898,054	\$632,028,549	\$303,529,533	
Base rate	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	
Base tax	\$468,195,300	\$314,455,296	\$358,260,580	\$260,474,514	\$158,007,137	\$75,882,383	
Taxable value per barrel	\$108.09	\$87.46	\$78.10	\$51.50	\$31.60	\$15.27	
Progressive tax rate	26.6%	23.0%	19.2%	8.6%	0.6%		
Progressive tax	\$497,397,040	\$289,102,592	\$275,726,004	\$89,595,168	\$4,057,416	\$0	
Tax before credits	\$965,592,340	\$603,557,888	\$633,986,584	\$350,069,682	\$162,064,553	\$75,882,383	
Credits applied	\$29,150,000	\$29,150,000	\$29,150,000	\$29,150,000	\$29,150,000	\$29,150,000	
Tax after credits	\$936,442,340	\$574,407,888	\$604,836,584	\$320,919,682	\$132,914,553	\$46,732,383	
Oil Price	\$99.01	\$42.78	\$47.75	\$46.56	\$58.23	\$69.80	
Total barrels per month	21,812,241	20,747,934	23,020,348	20,160,047	22,186,732	17,785,719	\$68.34
Royalty & Federal barrels	2,848,947	2,848,947	2,848,947	2,848,947	2,848,947	2,848,947	252,970,029
Taxable barrels per month	18,963,294	17,898,987	20,171,402	17,311,100	19,337,785	14,936,772	34,187,360
Wellhead value	\$32.51	\$36.28	\$41.25	\$40.06	\$51.73	\$63.30	218,782,669
Gross value of taxable bibls	\$616,496,702	\$649,375,248	\$837,070,320	\$693,482,668	\$1,000,343,635	\$945,497,689	\$61.84
Deductible Opex	\$170,833,333	\$170,833,333	\$170,833,333	\$170,833,333	\$170,833,333	\$170,833,333	\$13,178,367,102
Deductible Capex	\$145,833,333	\$145,833,333	\$145,833,333	\$145,833,333	\$145,833,333	\$145,833,333	\$2,050,000,000
Taxable value	\$299,830,035	\$332,708,581	\$515,403,653	\$376,816,001	\$683,676,969	\$628,831,022	\$1,750,000,000
Base rate	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	\$9,378,367,102
Base tax	\$74,957,509	\$83,177,145	\$128,850,913	\$94,204,000	\$170,919,242	\$157,207,756	\$2,344,591,775
Taxable value per barrel	\$15.81	\$18.59	\$25.55	\$21.77	\$35.35	\$42.10	\$44.27
Progressive tax rate			2.1%	2.1%	2.1%	4.8%	7.1%
Progressive tax	\$0	\$0	\$0	\$0	\$14,642,885	\$30,434,227	\$1,200,955,332
Tax before credits	\$74,957,509	\$83,177,145	\$128,850,913	\$94,204,000	\$185,562,128	\$187,641,982	\$3,545,547,108
Credits applied	\$29,150,000	\$29,150,000	\$29,150,000	\$29,150,000	\$29,150,000	\$29,150,000	\$349,800,000
Tax after credits	\$45,807,509	\$54,027,145	\$99,700,913	\$65,054,000	\$156,412,128	\$158,491,982	\$3,195,747,108
						Less adjustments	\$83,792,561
						TOTAL TAX	\$3,111,954,547

Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts



FY 09 Monthly Tax Calculations – Monthly Oil Price Volatility Matters!



	July	August	September	October	November	December
Oil Price	\$132.87	\$115.98	\$101.86	\$73.65	\$53.94	\$37.70
Total barrels per month	20,174,640	17,230,458	21,197,405	23,080,737	27,846,738	22,727,030
Royalty & Federal barrels	2,848,947	2,918,947	2,848,947	2,848,947	2,848,947	2,848,947
Taxable barrels per month	17,325,693	14,311,511	18,348,458	20,231,790	19,997,791	19,878,083
Wellhead value	\$126.37	\$109.48	\$95.30	\$67.15	\$47.44	\$31.20
Gross value of taxable bibs	\$2,189,447,867	\$1,574,487,860	\$1,749,708,987	\$1,358,564,724	\$948,655,216	\$620,195,200
Deductible Opex	\$170,833,333	\$170,833,333	\$170,833,333	\$170,833,333	\$170,833,333	\$170,833,333
Deductible Capex	\$145,833,333	\$145,833,333	\$145,833,333	\$145,833,333	\$145,833,333	\$145,833,333
Taxable value	\$1,872,781,200	\$1,257,821,193	\$1,433,042,320	\$1,041,898,054	\$627,028,549	\$303,529,533
Base rate	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Base tax	\$468,195,300	\$314,455,296	\$358,260,580	\$260,474,514	\$158,007,137	\$75,882,383
Taxable value per barrel	\$108.09	\$87.46	\$78.10	\$51.50	\$31.60	\$15.27
Progressive tax rate	26.6%	23.0%	19.2%	8.6%	0.6%	-
Progressive tax	\$497,397,040	\$289,102,592	\$275,726,004	\$89,595,108	\$4,057,416	\$0
Tax before credits	\$965,592,340	\$603,557,888	\$634,086,584	\$350,069,622	\$162,064,553	\$75,882,383
Credits applied	\$29,150,000	\$29,150,000	\$29,150,000	\$29,150,000	\$29,150,000	\$29,150,000
Tax after credits	\$936,442,340	\$574,407,888	\$604,936,584	\$320,919,622	\$132,914,553	\$46,732,383
Oil Price	\$39.01	\$42.78	\$47.75	\$46.56	\$58.23	\$69.89
Total barrels per month	1,817,222	2,747,944	2,520,348	2,160,057	2,186,712	1,785,733
Royalty & Federal barrels	2,848,947	2,848,947	2,848,947	2,848,947	2,848,947	2,848,947
Taxable barrels per month	3,963,294	17,893,927	2,027,102	1,511,100	19,337,782	14,936,772
Wellhead value	\$12.51	\$10.28	\$11.25	\$40.06	\$51.71	\$63.30
Gross value of taxable bibs	\$49,646,702	\$183,275,238	\$227,070,320	\$609,482,668	\$1,000,483,612	\$945,497,689
Deductible Opex	\$170,833,333	\$170,833,333	\$170,833,333	\$170,833,333	\$170,833,333	\$170,833,333
Deductible Capex	\$145,833,333	\$145,833,333	\$145,833,333	\$145,833,333	\$145,833,333	\$145,833,333
Taxable value	\$200,840,035	\$32,608,571	\$110,403,653	\$37,816,002	\$183,816,946	\$168,830,022
Base rate	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Base tax	\$74,927,509	\$8,152,177	\$27,600,913	\$9,451,500	\$45,954,236	\$42,207,505
Taxable value per barrel	\$15.81	\$18.59	\$53.55	\$24.77	\$35.33	\$44.27
Progressive tax rate	50	50	50	2.1%	2.1%	7.1%
Progressive tax	\$37,463,754	\$4,076,088	\$13,800,456	\$197,200,000	\$964,324,912	\$3,015,571,008
Tax before credits	\$112,391,263	\$12,228,265	\$41,401,369	\$126,651,500	\$141,908,448	\$145,223,006
Credits applied	\$45,807,509	\$58,027,145	\$99,700,013	\$65,654,000	\$156,412,128	\$158,491,982
Tax after credits	\$66,583,754	\$6,201,120	\$41,701,356	\$60,997,500	\$85,496,320	\$86,731,024
TOTAL TAX	\$3,111,954,547	\$1,954,919,661	\$2,154,712,597	\$1,354,354,744	\$1,321,979,106	\$1,154,544,766

Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts



FY 10 Production Tax Projected

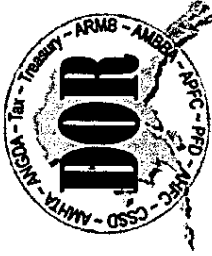


	Price	Barrels	Value
Avg ANS Oil Price (\$/bbl) & Daily Production (bbls)	\$66.93	658,762	\$44,090,941
Annual Production (bbl)			
Total		240,448,130	\$16,093,193,341
Royalty and Federal barrels		(31,230,860)	(\$2,090,281,460)
Taxable barrels		209,217,270	\$14,002,911,881
Downstream (Transportation) Costs (\$/bbl)			
ANS Marine Transportation	(\$2.07)		
TAPS Tariff	(\$4.18)		
Other	\$0.35		
Total Transportation Costs	(\$5.90)	209,217,270	(\$1,234,381,893)
Lease Expenditures			
Deductible Operating Expenditures	(\$9.08)		(\$1,900,000,000)
Deductible Capital Expenditures	(\$9.56)		(\$2,000,000,000)
Total Lease Expenditures	(\$18.64)	209,217,270	(\$3,900,000,000)
Production Tax Value (PTV)	\$42.39	209,217,270	\$8,868,529,988
Production Tax			
Base Tax (25%*PTV)			\$2,217,132,497
Progressive Tax = (5.0% * PTV)			\$439,492,116
Total Tax before credits			\$2,656,624,613
Credits Applied Against Taxes			
Total Tax after credits			(\$360,000,000)
Less adjustment			\$2,296,624,613
			(\$170,500,793)
Production Tax per forecast			\$2,126,123,820

Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts

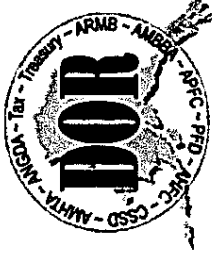


FY 11 Production Tax Projected

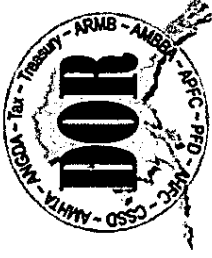


	Price	Barrels	Value
Avg ANS Oil Price (\$/bbl) & Daily Production (bbls)	\$76.35	622,879	\$47,556,812
Annual Production (bbl)			
Total	\$76.35	227,350,835	\$17,358,236,252
Royalty and Federal barrels		(29,293,075)	(\$2,236,526,276)
Taxable barrels		198,057,760	\$15,121,709,976
Downstream (Transportation) Costs (\$/bbl)			
ANS Marine Transportation	(\$2.05)		
TAPS Tariff	(\$4.40)		
Other	\$0.46		
Total Transportation Costs	(\$5.99)	198,057,760	(\$1,186,365,982)
Lease Expenditures			
Deductible Operating Expenditures	(\$10.60)		(\$2,100,000,000)
Deductible Capital Expenditures	(\$11.87)		(\$2,350,000,000)
Total Lease Expenditures	(\$22.47)	198,057,760	(\$4,450,000,000)
Production Tax Value (PTV)	\$47.89	198,057,760	\$9,485,343,994
Production Tax			
Base Tax (25%*PTV)			\$2,371,335,998
Production Tax Value per barrel			\$678,839,772
Progressive Tax = (7.2% * PTV)			\$3,050,175,770
Total Tax before credits			\$5,492,351,540
Credits Applied Against Taxes			(\$420,000,000)
Total Tax after credits			\$5,072,351,540
Less adjustment			(\$199,271,070)
Production Tax per forecast			\$2,430,904,700

Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts



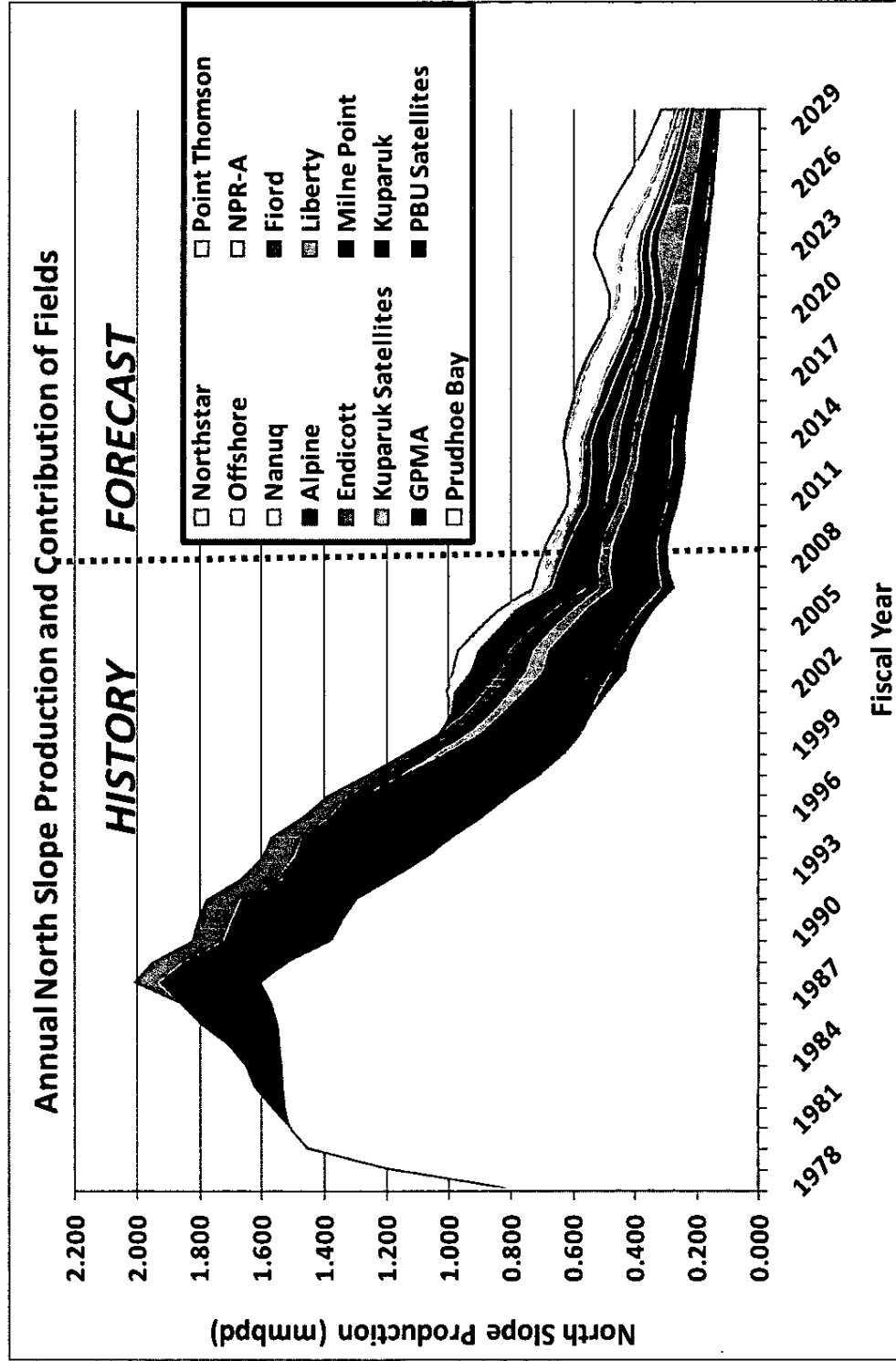
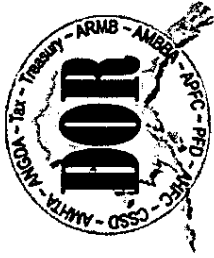
Components of Production Tax Calculation



Fall 2009 Oil Production Forecast



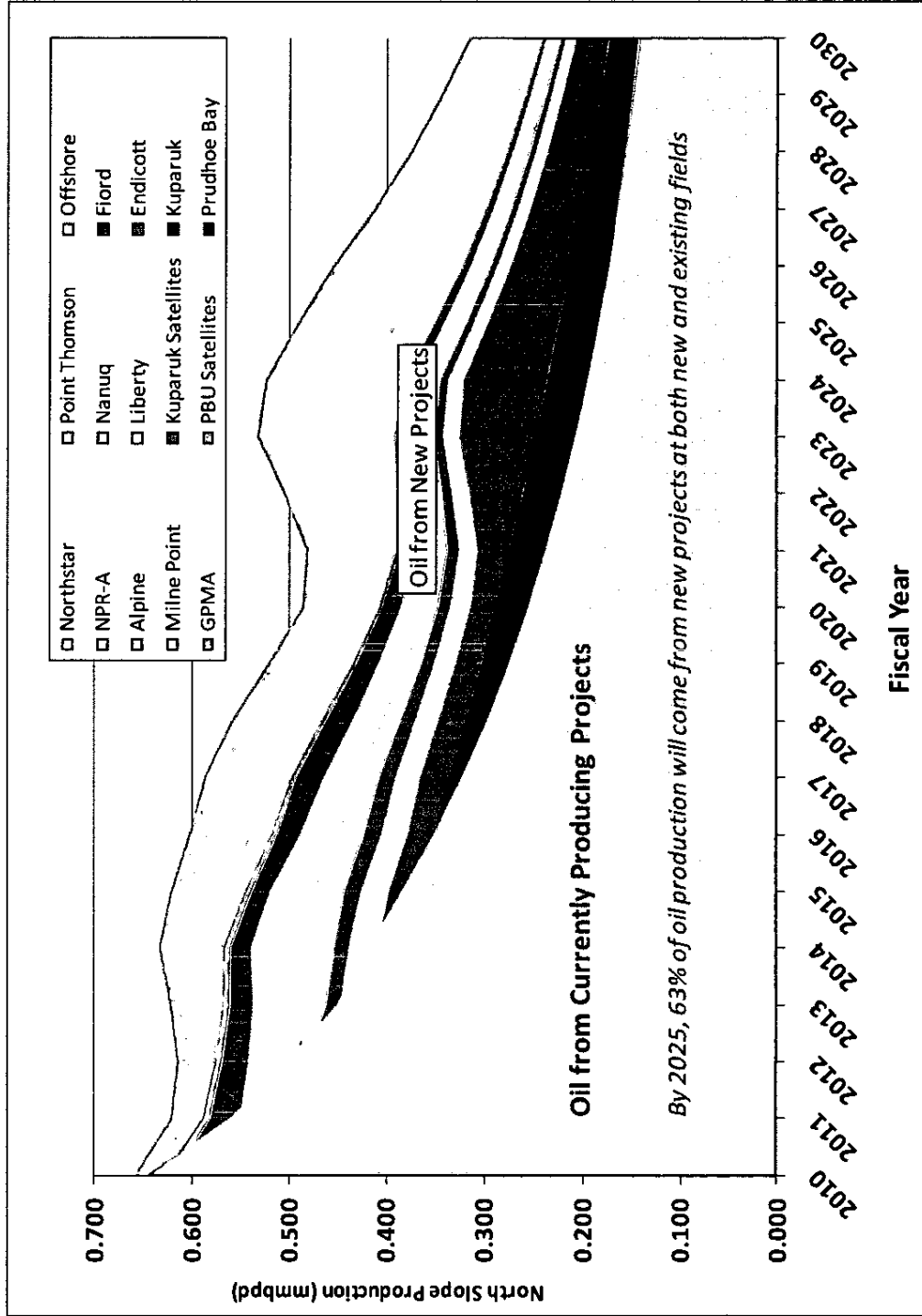
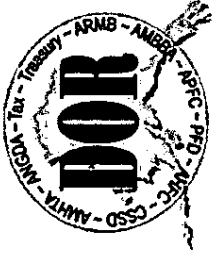
ANS Production, History & Forecast



Source: Fall 2009 Revenue Sources Book



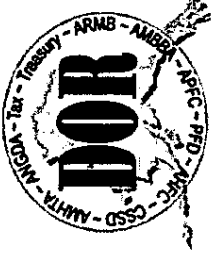
Forecasted ANS Production FY 2010 - 2030



Source: Fall 2009 Revenue Sources Book



Production Decline

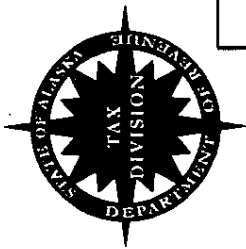


- **FY 1988: production peak → 2.01 mmbpd.**
- **FY 2009: production → 0.693 mmbpd, a 66% decline since peak.**
- **FY 1988 to date: production decline rate → 4.9% per year, on average.**
- **Over the last 10 years: production decline rate → 4.8% per year, on average.**
- **Forecast production decline rate → 3.6% per year, on average, through FY 2030.**

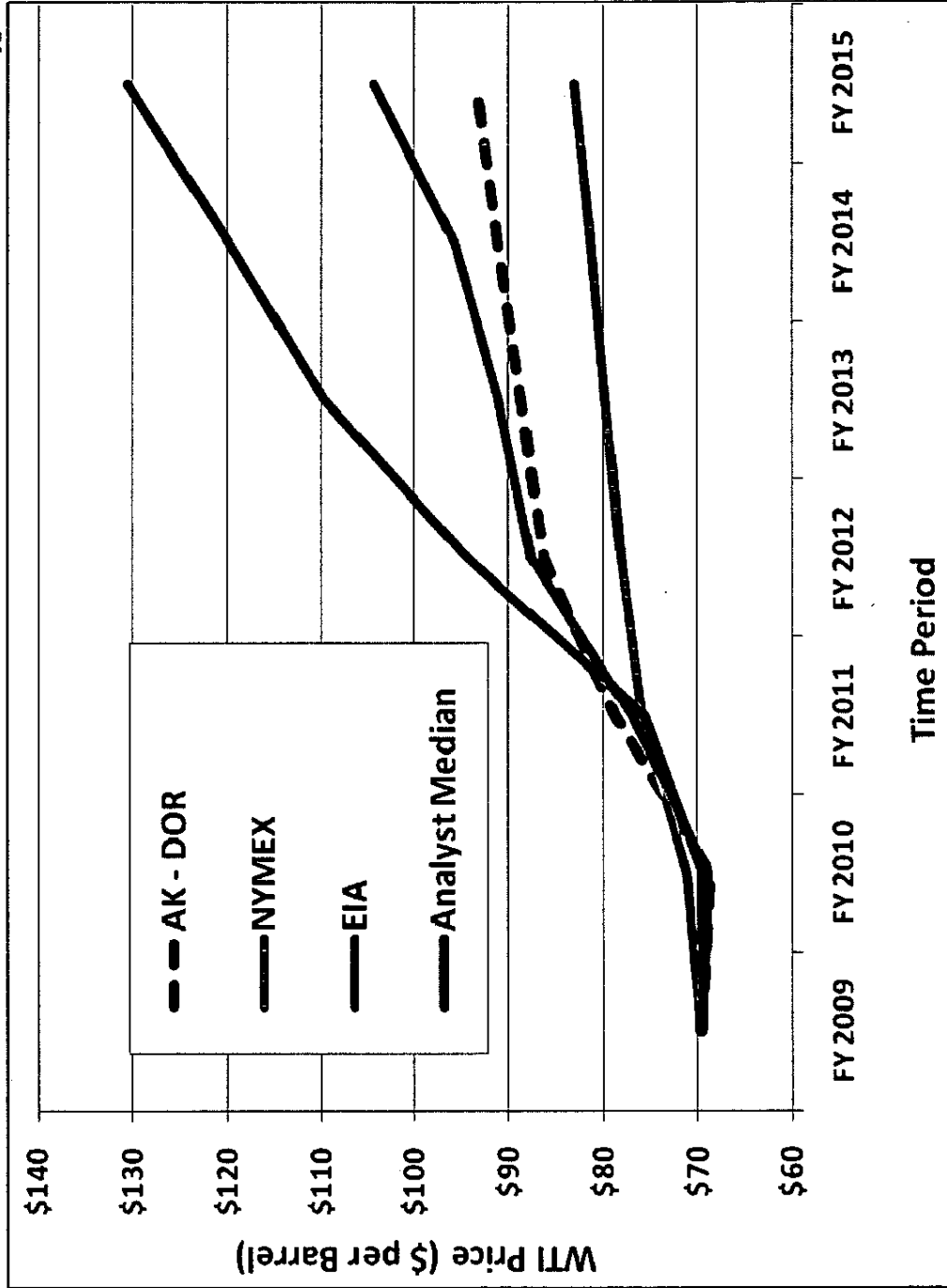
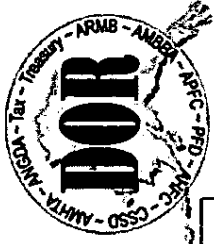


Fall 2009 Oil Price Forecast

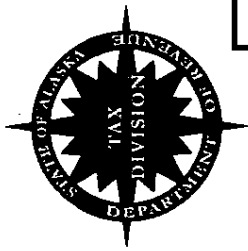




Price Forecasts as of October 2009



Source: DOR, Bloomberg, Wall St Journal, Energy Information Agency



Fall 2009 DOR Oil Price Forecast



Fiscal Year	WTI	ANS
2009	\$69.71	\$68.34
2010	\$68.71	\$66.93
2011	\$78.85	\$76.35
2012	\$86.43	\$83.93
2013	\$88.74	\$86.24
2014	\$91.11	\$88.61
2015	\$93.55	\$91.05

Source: Fall 2009 Revenue Sources Book



Fall 2009 Lease Expenditure Forecast (Oil Company Spending)





Lease Expenditures per Barrel



	FY 07	FY 08	FY 09	FY 10	FY 11
Lease Expenditures (\$ millions)					
Operating Expenditures (OPEX)	2,081	1,881	2,085	1,996	2,100
Capital Expenditures (CAPEX)	1,578	1,967	2,212	2,505	2,923
Production (bpd)	739,702	715,950	692,127	658,762	622,879
Lease Expenditures per barrel (\$)					
OPEX per barrel (\$)	7.71	7.20	8.25	8.30	9.24
CAPEX per barrel (\$)	5.84	7.53	8.76	10.42	12.86

Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts